Auto Pro Gun Manual

CPC / CPG / CPT / PRTM-DG

MagnumVenusProducts™

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MagnumVenusProducts™

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Table of Contents

SECTION:	Page
TERMS & CONDITIONS OF SALE	4
SAFETY & WARNINGS	6
INTRODUCTION	15
GUN BLOCK DISASSEMBLY	19
GUN BLOCK ASSEMBLY	24
ACTUATOR REBUILD	31
PARTS DRAWINGS	34
REVISION INFORMATION	82

Terms & Conditions of Sale:

- Customs duties, import and export licenses and certificates, if required, and all local taxes are excluded from this offer. If US state and local taxes are applicable and not included in equipment invoice, such amount may be invoiced later.

- Delivery dates or shipping schedules are approximate and based upon the most recent information available at the time of order. Dates may be adjusted upon receipt of subsequent information or modification of order. Seller will ship prior to the delivery date if possible, but not without Buyer's consent on Advanced Equipment sales.

- All contract dates and timelines begin upon receipt at MVP of customer purchase order, signed Terms and Conditions of Sale (if applicable), and down payment per quotation (if applicable).

- If shipments are delayed by the Buyer, or because the Buyer's account is in arrears, payments shall become due on the date when the Seller is prepared to make shipment. Products held by the Seller for the Buyer shall be at the risk and expense of the Buyer.

- Damages, defects or shortages must be communicated immediately to MVP. Discrepancy in pricing and/or quantities on invoices must be reported within 30 days of the invoice date. Claims made 30 days or more following the invoice date will not be honored.

- Permission to return items must be requested and granted in advance. No credit will be given if items are returned prior to requesting and receiving permission. All returns are subject to a restocking fee. The standard 15% charges may be increased or decreased depending on the reason for the return. Special ordered items may not be returned.

- Seller warrants that the mechanical operation of the goods as specified shall be free from faults in respect to materials and workmanship for a period of 12 months for parts from the date of invoice. For systems, 12 months from start-up or, if earlier, 18 months from the date of the Bills of Lading. The warranty does not cover general wear and tear or damage due to negligence or improper use. Seller's liability under the warranty shall be limited solely to repair or replacement costs, and has no responsibility for reimbursing repair cost incurred by Buyer in connection with equipment without first giving written authorization for such charges. Seller makes no express warranties except those set forth in this agreement, and disclaims all other warranties, expressed or implied, including without limitation, implied warranties of non-infringement merchantability and fitness for a particular purpose. Seller accepts no liability for loss of production, loss of profits, or other direct or indirect damages. In any claim by the Buyer

against the Seller in respect of the goods, the liability of the Seller shall be limited to the value of the goods.

- Many factors beyond Seller's control contribute to the success of Buyer's finished products, such as raw materials used to manufacture the product. Equipment is warranted to perform to specifications detailed in quotation, but Seller is not liable for quality or quantity of finished products produced by Buyer.

- The country of origin is the United States of America. Sale, installation and all rights of the parties are governed by the laws of the state of Florida. Venue with regard to any litigation shall be in Pinellas County, Florida. The parties agree to waive all rights to trial by jury as to any and all disputes.

- The goods remain the property of the Seller until full payment is received.

- Sale of equipment is subject to application and issuance of proper US Government export license and regulations, if applicable.

- Installation of equipment is responsibility of Buyer and Seller, with cost responsibility and number of days provided as detailed in original customer Quotation. Seller will provide installation supervision personnel within 30 days of customer request. If installation is delayed by the Buyer more than six months from the date of shipment, or if customer facility or material/parts are not prepared for installation, seller will invoice full installation costs, up to $1,250 a day plus expenses, for each MVP installation technician on site. Seller has the option to waive this fee at its discretion.

- Parties shall be excused for delays caused by embargoes, acts of civil or military authorities, Acts of God, or other circumstances beyond the reasonable control of the parties. Notification of such delays must be made in writing within ten days of occurrence.

- Our agreement supersedes any previous agreement and applies in full.

SAFETY & WARNING INFORMATION:

OPERATING YOUR POLYESTER SYSTEM SAFELY

1. Introduction

Any tool, if used improperly, can be dangerous. Safety is ultimately the responsibility of those using the tool. In like manner, safe operation of polyester processes is the responsibility of those who use such processes and those who operate the equipment. This manual outlines procedures to be followed in conducting polyester operations safety. This system has been specifically designed for use of Polyester Resin, Gel-Coat, and Methyl Ethyl Ketone Peroxides (MEKP) applications. Other formulations or blends considered for use in this equipment is strictly prohibited without the expressed consent by Magnum Venus Products Inc. Magnum Venus Products cannot eliminate every danger nor foresee every circumstance that might cause an injury during equipment operation. Some risks, such as the high pressure liquid stream that exits the spray tip, are inherent to the nature of the machine operation and are necessary to the process in order to manufacture the end-product. For this reason, ALL personnel involved in polyester operations should read and understand the Safety Manual. It is very important for the safety of employees involved in the operation that equipment operators, maintenance and supervisory personnel understand the requirements for safe operation. Each user should examine his own operation, develop his own safety program and be assured that his equipment operators follow correct procedures. Magnum Venus Products hopes that this manual is helpful to the user and recommends that the precautions in this manual be included in any such program. Magnum Venus Products recommends this Safety Manual remain on your equipment at all times for your personnel safety. In addition to the manual, Magnum Venus Products recommends that the user consult the regulations established under the Occupational Safety & Health Act (OSHA), particularly the following sections:

1910.94 Pertaining to Ventilation.

1910.106 Pertaining to flammable liquids

1910.107 Pertaining to spray finishing operations, particularly Paragraph (m) Organic Peroxides and Dual Component Coatings.

Other standards and recognized authorities to consult are the National Fire Protection Association (NFPA) bulletins as follows:

NFPA No.33 Chapter 14, Organic Peroxides and Dual Component Materials

NFPA No.63 Dust Explosion Prevention

NFPA No.70 National Electrical Code

NFPA No.77 Static Electricity

NFPA No.91 Blower and Exhaust System

NFPA No.654 Plastics Industry Dust Hazards

Type of Fire Extinguishing equipment recommended: Fire Extinguisher – code ABC, rating number 4a60bc.

Extinguishing Media – Foam, Carbon Dioxide, Dry Chemical, Water Fog.

Copies of the above bulletins are available, at a nominal charge from:

National Fire Protection Association
470 Atlantic Avenue
Boston, MA 02210

Research Report No.11 of the American Insurance Association deal with “Fire, Explosion and Health Hazards of Organic Peroxides”. It is published by:

American Insurance Association
85 John Street
New York, NY 10038

Local codes and authorities also have standards to be followed in the operation of your spraying equipment. Your insurance carrier will be helpful in answering questions that arise in your development of safe procedures.

1.2 Personal Safety Equipment

Magnum Venus Products recommends the following Personal Safety Equipment for conducting safe operations of the Polyester Systems:

Magnum Venus Products recommends that the user consult the state and local regulations established for all Safety equipment listed.

2.0 Material Safety

2.1 Hazards Associated with Laminating Operations

The major hazards which should be guarded against in polyester laminating operations are those associated with:

1. The flammability and explosion dangers of the catalyst normally used – Methyl Ethyl Ketone Peroxide (MEKP).

2. The flammability dangers of clean-up solvents sometimes used (Magnum Venus Products recommends that clean-up solvents be non-flammable), and of resin diluents used, such as styrene.

3. The flammability dangers of catalyst diluents, if used. (Magnum Venus Products recommends that catalyst not be diluted.

4. The flammability dangers of the uncured liquid resins used.

5. The combustibility dangers of the cured laminate, accumulations of over spray, and laminate sandings.

6. The toxicity dangers of all the chemicals used in laminating operations with respect to ingestion, inhalation and skin and eye hazards.

2.2 Catalyst (Methyl Ethyl Ketone Peroxide)

MEKP is among the more hazardous materials found in commercial channels. The safe handling of the “unstable (reactive)” chemicals presents a definite challenge to the plastics industry. The highly reactive property which makes MEKP valuable to the plastics industry in producing the curing reaction of polyester resins also produces the hazards which require great care and caution in its storage, transportation, handling, processing and disposal. MEKP is a single chemical. Various polymeric forms may exist which are more or less hazardous with respect to each other. These differences may arise not only from different molecular structures (all are, nevertheless, called “MEKP”) and from possible trace impurities left from the manufacture of the chemicals, but may also arise by contamination of MEKP with other materials in its storage or use. Even a small amount of contamination with acetone, for instance, may produce an extremely shock-sensitive and explosive compound.

Contamination with promoters or materials containing promoters, such as laminate sandings, or with any readily oxidizing material, such as brass or iron, will cause exothermic “redox” reactions which can become explosive in nature. Heat applied to MEKP, or heat build-up from contamination reactions can cause it to reach what is called its Self-Accelerating Decomposition Temperature (SADT).

Researchers have reported measuring pressure rates-of-rise well in excess of 100,000 psi per second when certain MEKP’s reach their SADT. (For comparison, the highest pressure rate-of-rise listed in NFPA Bulletin NO.68, “Explosion Venting”, is 12,000 psi per second for an explosion of 12% acetylene and air. The maximum value listed for a hydrogen explosion is 10,000 psi per second. Some forms of MEKP, if allowed to reach their SADT, will burst even an open topped container. This suggests that it is not possible to design a relief valve to vent this order of magnitude of pressure rate-of-rise. The user should be aware that any closed container, be it a pressure vessel, surge chamber, or pressure accumulator, could explode under certain conditions. There is no engineering substitute for care by the user in handling organic peroxide catalysts. If, at any time, the pressure relieve valve on top of the catalyst tank should vent, the area should be evacuated at once and the fire department called. The venting could be the first indication of a heat, and therefore, pressure build-up that could eventually lead to an explosion. Moreover, if a catalyst tank is sufficiently full when the pressure relief valve vents, some catalyst may spray out, which could cause eye injury. For this reason, and many others, anyone whose job puts them in an area where this vented spray might go, should always wear full eye protection even when laminating operations are not taking place.

Safety in handling MEKP depends to a great extent on employee education, proper safety instructions and safe use of the chemicals and equipment. Workers should be thoroughly informed of the hazards that may result from improper handling of MEKP, especially in regards to contamination, heat, friction and impact. They should be thoroughly instructed regarding the proper action to be taken in the storage, use and disposal of MEKP and other hazardous materials used in the laminating operation. In addition, users should make every effort to:

A. Store MEKP in a cool, dry place in original containers away from direct sunlight and away from other chemicals.

B. Keep MEKP away from heat, sparks and open flames.

C. Prevent contamination of MEKP with other materials, including polyester over spray and sandings, polymerization accelerators and promoters, brass, aluminum and non-stainless steels.

D. Never add MEKP to anything that is hot, since explosive decomposition may result.

E. Avoid contact with skin, eyes and clothing. Protective equipment should be worn at all times. During clean-up of spilled MEKP, personal safety equipment, gloves and eye protection must be worn. Firefighting equipment should be at hand and ready.

F. Avoid spillage, which can heat up to the point of self-ignition.

G. Repair any leaks discovered in the catalyst system immediately, and clean up the leaked catalyst at once in accordance with the catalyst manufacturer's instructions.

H. Use only original equipment or equivalent parts from Magnum Venus Products in the catalyst system (i.e.: hoses, fitting, etc.) because a dangerous chemical reaction may result between substituted parts and MEKP.

I. Catalyst accumulated from the purging of hoses or the measurement of fluid output deliveries should never be returned to the supply tank, such catalyst should be diluted with copious quantities of clean water and disposed of in accordance with the catalyst manufacturer's instructions.

The extent to which the user is successful in accomplishing these ends and any additional recommendations by the catalyst manufacturer determines largely the safety that will be present in his operation.

2.3 Clean-Up Solvents and Resin Diluents

WARNING

A hazardous situation may be present in your pressurized fluid system! Hydrocarbon Solvents can cause an explosion when used with aluminum or galvanized components in a closed (pressurized) fluid system (pump, heaters, filters, valves, spray guns, tanks, etc.). The explosion could cause serious injury, death and/or substantial property damage. Cleaning agents, coatings, paints, etc. may contain Halogenated Hydrocarbon Solvents. Some Magnum Venus Products spray equipment includes aluminum or galvanized components and will be affected by Halogenated Hydrocarbon Solvents.

A. There are three key elements to the Halogenated Hydrocarbon (HHC) solvent hazard.

a. The presence of HHC solvents. 1,1,1 – Trichloroethane and Methylene Chloride are the most common of these solvents. However, other HHC solvents are suspect if used; either as part of paint or adhesives formulation, or for clean-up flushing. b. Aluminum or Galvanized Parts. Most handling equipment contains these elements. In contact with these metals, HHC solvents could generate a corrosive reaction of a catalytic nature.

b. Equipment capable of withstanding pressure. When HHC solvent contacts aluminum or galvanized parts inside a closed container such as a pump, spray gun, or fluid handling system, the chemical reaction can, over time, result in a build-up of heat and pressure, which can reach explosive proportions.

When all three elements are present, the result can be an extremely violent explosion. The reaction can be sustained with very little aluminum or galvanized metal; any amount of aluminum is too much.

A. The reaction is unpredictable. Prior use of an HHC solvent without incident (corrosion or explosion) does NOT mean that such use is safe. These solvents can be dangerous alone (as a clean-up or flushing agent) or when used as a component or a coating material. There is no known inhibitor that is effective under all circumstances. Furthermore, the mixing of HHC solvents with other materials or solvents, such as MEKP, alcohol, and toluene, may render the inhibitors ineffective.

B. The use of reclaimed solvents is particularly hazardous. Reclaimers may not add any inhibitors. Also, the possible presence of water in reclaimed solvents could feed the reaction.

C. Anodized or other oxide coatings cannot be relied upon to prevent the explosive reaction. Such coatings can be worn, cracked, scratched, or too thin to prevent contact. There is no known way to make oxide coatings or to employ aluminum alloys, which will safely prevent the chemical reaction under all circumstances.

D. Several solvent suppliers have recently begun promoting HHC solvents for use in coating systems. The increasing use of HHC solvents is increasing the risk. Because of their exemption from many State Implementation Plans as Volatile Organic Compounds

(VOC's), their low flammability hazard, and their not being classified as toxic or carcinogenic substances, HHC solvents are very desirable in many respects.

WARNING: **Do not use Halogenated Hydrocarbon solvents in pressurized fluid systems having aluminum or galvanized wetted parts.**

NOTE: **Magnum Venus Products is aware of NO stabilizers available to prevent Halogenated Hydrocarbon solvents from reaction under all conditions with aluminum components in closed fluid system.** ***TAKE IMMEDIATE ACTION…*** **Halogenated Hydrocarbon solvents are dangerous when used with aluminum components in a closed fluid system.**

A. Consult your material supplier to determine whether your solvent or coating contains Halogenated Hydrocarbon Solvents.

B. Magnum Venus Products recommends that you contact your solvent supplier regarding the best non-flammable clean-up solvent with the heat toxicity for your application.

C. If, however, you find it necessary to use flammable solvents, they must be kept in approved, electrically grounded containers.

D. Bulk solvent should be stored in a well-ventilated, separate building, 50 feet away from your main plant.

E. You should allow only enough solvent for one day's use in your laminating area.

F. "NO SMOKING" signs must be posted and observed in all areas of storage or where solvents and other flammable materials are used.

G. Adequate ventilation (as covered in OSHA Section 1910.94 and NFPA No.91) is important wherever solvents are stored or used, to minimize, confine and exhaust the solvent vapors.

H. Solvents should be handled in accordance with OSHA Section 1910.106 and 1910.107.

2.4 Catalyst Diluents

Magnum Venus Products spray-up and gel-coat systems currently produced are designed so that catalyst diluents are not required. Magnum Venus Products, therefore, recommends that diluents not be used. This avoids the possible contamination which could lead to an explosion due to the handling and mixing of MEKP and diluents. In addition, it eliminates any problems from the diluents being contaminated through rust particles in drums, poor quality control on the part of the diluents suppliers, or any other reason. If, however, diluents are absolutely required, contact your catalyst supplier and follow his instructions explicitly. Preferable, the supplier should premix the catalyst to prevent possible “on the job” contamination while mixing.

WARNING

If diluents are not used, it should be remembered that catalyst spillage, gun, hose and packing leaks are potentially more hazardous, since each drop contains a higher concentration of catalyst, and therefore will react quicker with over spray and the leak.

2.5 Cured Laminate, Overspray and Laminate Sandings Accumulation

A. Remove all accumulations of overspray, FRP sandings, etc. from the building as they occur. If this waste is allowed to build up, spillage of catalyst is more likely to start a fire; in addition, the fire would burn hotter and longer.

B. Floor coverings, if used, should be non-combustible.

C. Spilled or leaked catalyst may cause a fire if it comes in contact with an FRP product, over-sprayed chop or resin, FRP sandings or any other material with MEKP.

To prevent this spillage and leakage, you should:

1. Maintain your Magnum Venus Products System. Check the gun several times daily for catalyst and resin packing or valve leaks. REPAIR ALL LEAKS IMMEDIATELY.

2. Never leave the gun hanging over, or lying inside the mold. A catalyst leak in this situation would certainly damage the part, possibly the mold, and may cause a fire.

3. Inspect resin and catalyst hoses daily for wear or stress at the entry and exits of the boom sections and at the hose and fittings. Replace if wear or weakness is evident or suspected.

4. Arrange the hoses and fiberglass roving guides so that the fiberglass strands DO NOT rub against any of the hoses at any point. If allowed to rub, the hose will be cut through, causing a hazardous leakage of material which could increase the danger of fire. Also, the material may spew onto personnel in the area.

2.7 Toxicity of Chemicals

A. Magnum Venus Products recommends that you consult OSHA Sections 1910.94, 1910.106, 1910.107 and NFPA No.33, Chapter 14, and NFPA No.91.

B. Contact your chemical supplier(s) and determine the toxicity of the various chemicals used as well as the best methods to prevent injury, irritation and danger to personnel.

C. Also determine the best methods of first aid treatment for each chemical used in your plant.

2.8 Treatment of Chemical Injuries

Great care should be used in handling the chemicals (resins, catalyst and solvents) used in polyester systems. Such chemicals should be treated as if they hurt your skin and eyes and as if they are poison to your body. For this reason, Magnum Venus Products recommends the use of protective clothing and eye wear in using polyester systems. However, users should be prepared in the event of such an injury. Precautions include:

1. Know precisely what chemicals you are using and obtain information from your chemical supplier on what to do in the event the chemical gets onto your skin or into the eyes, or is swallowed.

2. Keep this information together and easily available so that it may be used by those administering first aid or treating the injured person.

3. Be sure the information from your chemical supplier includes instructions on how to treat any toxic effects the chemicals have.

WARNING

Contact your doctor immediately in the event of any injury and give him the information you have collected. If your information includes first aid instructions, administer first aid immediately while you are contacting your doctor.

Fast treatment of the outer skin and eyes that contact such chemicals generally includes immediate and thorough washing of the exposed skin and immediate and continuous flushing of the eyes with lots of clean water for at least 15 minutes or more. These general instructions of first aid treatment, however, may be incorrect for some chemicals; that is why you must know the chemicals and treatment before an accident occurs. Treatment for swallowing a chemical frequently depends upon the nature of the chemical.

NOTE: **Refer to your System User Manual for complete and detailed operating instructions and service information.**

3.0 Equipment Safety

WARNING

Magnum Venus Products suggests that personal safety equipment such as EYE GOGGLES, GLOVES, EAR PROTECTION, and RESPIRATORS be worn when servicing or operating this equipment. Ear protection should be worn when operating a fiberglass chopper to protect against hearing loss since noise levels can be as high as 116 dB (decibels). This equipment should only be operated or serviced by technically trained personnel!

WARNING

Never place fingers, hands, or any body part near or directly in front of the spray gun fluid tip. The force of the liquid as it exits the spray tip can cause serious injury by shooting liquid through the skin. NEVER LOOK DIRECTLY INTO THE GUN SPRAY TIP OR POINT THE GUN AT OR NEAR ANOTHER PERSON. (TREAT THE GUN AS IF IT WERE A LOADED PISTOL.)

3.1 Emergency Stop Procedures

The following steps should be followed in order to stop the machinery in an emergency situation

1. The ball valve located where the air enters the power head of the resin pump, should be moved to the “OFF” or closed position. To do this, simply rotate the lever on the ball valve 90 degrees. Doing this will cause all the system air to bleed out of the system in a matter of a few seconds, making the system incapable of operating

NOTE: Step 2 is a precautionary step and should be followed whenever the above mentioned ball valve is activated to the stop mode. Failure to do so, can damage the regulators and components on reactivating to the “ON” position.

2. Turn all system regulators to the “OFF” position (counter-clockwise) position

NOTE: Verify that the Catalyst relief line, located on the catalyst manifold, and the resin return line, located on the resin filter, are secured relieving catalyst and resin fluid pressure.

3. Catalyst pressure in the catalyst pump can be eliminated by rotating the ball valve on the catalyst manifold 90 degrees to the “open” or “on” position.

Note: The “open” or “on” position is when the ball valve handle is parallel (in line) with the ball valve body. The “closed” or “off” position is when the ball valve handle is perpendicular (across) the ball valve body.

4. Resin pressure in the resin pump can be eliminated by rotating the ball valve on the resin filter 90 degrees to the “open” or “on” position. Place a container under the ball valve to catch any resin that is ejected out of the valve.

3.2 Grounding

Grounding an object means providing an adequate path for the flow of the electrical charge from the object to the ground. An adequate path is one that permits charge to flow from the object fast enough that it will not accumulate to the extent that a spark can be formed. It is not possible to define exactly what will be an adequate path under all conditions since it depends on many variables. In any event, the grounding means should have the lowest possible electrical resistance. Grounding straps should be installed on all loose conductive objects in the spraying area. This includes material containers and equipment. Magnum Venus Products recommends grounding straps be made of AWG No.18 stranded wire as a minimum and the larger wire be used where possible. NFPA Bulletin No77 states that the electrical resistance of such a leakage path may be as low as 1 meg ohm (10 ohms) but that resistance as high as 10,000 meg ohms will produce an adequate leakage path in some cases. Whenever flammable or combustible liquids are transferred from one container to another, or from one container to the equipment, both containers or container and equipment shall be effectively bonded and grounded to dissipate static electricity. For further information, see **National Fire Protection Association** (NFPA) 77, titled "Recommended Practice on Static Electrical". Refer especially to section 7-7 titled "Spray Application of Flammable and Combustible Materials". Check with local codes and authorities for other specific standards that might apply to your application. NEVER USE HARD MATERIALS SUCH AS WIRE, PINS, ETC., TO CLEAR A PLUGGED GUN. HARD MATERIALS CAN CAUSE PERMANENT DAMAGE. DAB WITH A BRISTLE BRUSH, BLOW BACKWARDS WITH AIR UNTIL CLEAR WHILE WEARING A PROTECTIVE EYE SHIELD. REPEAT AS MANY TIMES AS NECESSARY. DO NOT PERFORM ANY MAINTENANCE OR REPAIRS UNTIL YOU HAVE FOLLOWED THE PRECAUTIONS STATED ABOVE. IF YOU, AS AN EQUIPMENT OPERATOR OR SUPERVISOR, DO NOT FEEL THAT YOU HAVE BEEN ADEQUATELY TRAINED OR INSTRUCTED AND THAT YOU LACK THE TECHNICAL KNOWLEDGE TO OPERATE OR PERFORM MAINTENANCE ON A PIECE OF MAGNUM VENUS PRODUCTS EQUIPMENT, PLEASE CALL MAGNUM VENUS PRODUCTS BEFORE OPERATING OR PERFORMING MAINTENANCE ON THE EQUIPMENT. IF YOU HAVE ANY QUESTIONS REGARDING THE ABOVE PRECAUTIONS OR ANY SERVICE OR OPERATION PRECEDURES, CALL YOUR MAGNUM VENUS PRODUCTS DISTRIBUTOR OR MAGNUM VENUS PRODUCTS.

NOTICE: All statements, information and data given herein are believed to be accurate and reliable but are presented without guaranty, warranty or responsibility of any kind express or implied. The user should not assume that all safety measures are indicated or that other measures are not required.

DANGER: Contaminated catalyst may cause Fire or Explosion. Before working on the catalyst pump or catalyst accumulator, wash hands and tools thoroughly. Be sure work area is free of dirt, grease or resin. Clean catalyst system components with clean water only.

DANGER: Eye, skin and respiration hazard. The Catalyst, MEKP, may cause blindness, skin irritation or breathing difficulty. Keep hands away from face. Keep food and drink away from work area.

WARNING: Please refer to your catalyst manufacturer's safety information regarding the safe handling and storage of catalyst. Wear appropriate safety equipment as recommended.

Introduction:

The Auto Pro Gun is an air trigger gun; meaning when an air signal is sent the actuator the actuator piston pushes on the actuator stem and rotates the gun block into the on position. The Auto Pro Gun works very similar to a dual ball valve in that the valve rod rotates and the catalyst and resin holes line up with the ports in the gun block allowing material to flow. The actuator is an air cylinder and as the piston moves back and forth it rotates the valve rod 90 degrees to the on or off position.

Generally, the Auto Pro Gun ™ will not need to be completely disassembled for daily cleaning. However, the entire gun should be disassembled and the o-rings and seals replaced approximately every six months.

Disassembling the Auto Pro Gun™ is easy; the gun breaks down into four separate modules which are then disassembled further into their individual parts. A special tool kit, which includes a specially designed Pro Gun™ tool and a packing assembly tool, is available to aid in performing maintenance and repair.

This manual, the ***AUTO PRO GUN REPAIR MANUAL***, provides information you need to perform simple maintenance and repair on your equipment.

- Step-by-step assembly and disassembly procedures are included for each component.

Please read the manual carefully. Follow the steps in the order given, otherwise you may damage the equipment or injure yourself.

DANGER: Always wear proper safety equipment, including eye protection and gloves when performing service and repair on this equipment.

During Disassembly:

As you disassemble the equipment, lay out the components on a clean surface in the correct order and direction. This will help you to reassemble them.

Gun Assemblies & Components:

This manual covers the following Auto Pro Gun Assemblies:

58685-1	AUTO PRO GUN ASSEMBLY
CPG-1000-A	AUTO PRO GUN ASSEMBLY
CPG-1000-A-INT	AUTO PRO GEL COAT GUN – INTERNATIONAL
CPG-2000-A	AUTO PRO GEL COAT GUN – FIT
CPG-2000-A-INT	AUTO PRO GEL COAT GUN – INTERNATIONAL FIT
CPC-1000-A	AUTO PRO CHOPPER GUN
CPC-1000-A-INT	AUTO PRO CHOPPER GUN – INTERNATIONAL
CPC-1000-A-INV	AUTO PRO GUN ASSEMBLY – INNOVATOR
CPC-2000-A	AUTO PRO CHOPPER GUN – FIT
CPC-2000-A-INT	AUTO PRO CHOPPER GUN – INTERNATIONAL FIT
CPT-2000-A	AUTO PRO GUN ASSEMBLY – TAPE MACHINE
PRTM-DG-3000-A	AUTO PRO GUN ASSEMBLY – INNOVATOR DISPENSE GUN

This manual also covers the following Pro Gun Components:

58602-1	PRO GUN BLOCK ASSEMBLY
58604-1	PRO GUN ACTUATOR ASSEMBLY
CPC-1100-INV	PRO GUN BLOCK ASSEMBLY – INNOVATOR
CPC-1200-A-X	PRO GUN ACTUATOR ASSEMBLY
PRTM-DG-1200-A	PRO GUN ACTUATOR ASSEMBLY – DISPENSE GUN
5104-00-X-A	AUTO PRO GUN BLOCK ASSEMBLY
5104-00-X-A-INT	AUTO PRO GUN BLOCK ASSEMBLY – INTERNATIONAL
VFTC-4100-X-A	AUTO PRO GUN BLOCK ASSEMLBY – FIT
VFTC-4100-X-A-INT	AUTO PRO GUN BLOCK ASSEMBLY – FIT INTERNATIONAL
58742-1	AUTOMATIC FLUSH VALVE ASSEMBLY
58742-1-INT	AUTOMATIC FLUSH VALVE ASSEMBLY – INTERNATIONAL

Below are the Repair Kits used for the Auto Pro Gun Assemblies:

6702-016-01-A	REPAIR KIT – PRO GUN BLOCK – GUN BLOCK ONLY
CPT-2000-A-RK	REPAIR KIT – AUTO PRO GUN
PRTM-DG-3000-A-RK	REPAIR KIT – DISPENSE GUN

Tools required

You will need the following tools:

- Rubber mallet
- Thread Sealant
- Adjustable wrench
- Needle-nose pliers
- Flat-end screwdriver
- Lubriplate™ lubricant (08465)
- Scribe set (08126)
- Pro Gun ™ oil (04394)
- Turbulent Mixer Puller (6705-2-1)
- Seal Installation tool (58661-1)
- Alignment tool for resin seals (58663-1)
- Alignment tool for catalyst seals (58662-1)
- Pro Gun ™ screwdriver (9301-3-2) and packing bit (6705-1-1)

You should also have appropriate cleaning materials such as solvent, clean shop towels or rags, a small brush, and empty containers into which you will flush the gun.

Also, you will need new o-rings and seals to replace the current ones in the Pro Gun™. Please refer to the parts drawings to obtain proper parts numbers for the o-rings and seals to be replaced.

Note: If you are using o-ring part number 01128 in the gun block, you do not need to replace the o-ring unless it is showing obvious signs of wear. This o-ring is specially designed to handle most solvents

Release System Pressure

1. Turn off air supply to pumping system.

2. Release fluid pressure from lines by holding the gun over an appropriate empty container and pulling the trigger.

3. Flush gun into appropriate container

4. Turn off air supply to the solvent tank.

5. Release any pressure in the flush tank by gently pulling upwards on the ring attached to the pressure relief valve.

6. Disconnect air line from rear of gun handle.

7. Place an empty container under the ball valve located at the bottom of the filter assembly.

8. SLOWLY open the ball valve, you can leave the ball valve open or close it when the all the pressure has been released.

Disable Catalyst Pump

Slave Arm pumps

1. Remove the quick pin from the top of the catalyst pump and upper slave arm.

2. Tilt the catalyst pump away from the resin pump until the catalyst pump is resting against the vertical connecting post.

3. Trap the catalyst pump's upper bearing block between the vertical connecting post and the quick pin.

Ultra Proportioning System (UPS)

1. Remove the hairpin from the quick pin assembly.

2. Remove the quick pin assembly from the pivot link assembly

Remove Hoses

Note: Although previous steps should have removed all pressure from the lines, there may still be trapped fluids under pressure in the lines. Read the recommended safety procedures below.

WARNING: Wear appropriate eye protection. Pressurized fluids may cause eye injuries.

WARNING: When removing hoses from fittings, wrap a large rag or shop towel around the wrench and fitting as you remove the fitting. Remove fitting slowly to allow any pressurized fluid to escape into the rag or towel.

1. Wrap a large rag or shop towel around the resin fitting and a wrench.

2. Use the wrench to loosen the fitting slowly until you can remove the resin hose from the fitting.

3. Use this technique to remove the solvent hose, and the catalyst hose.

Gun Disassembly:

WARNING: To prevent injury, be sure all air is disconnected from the gun and that all pressure has been relieved before attempting to remove trigger guard.

Note: The bolt that secures the trigger guard to the air cylinder also serves as a plug for the end cap. Removing this bolt can result in injury from escaping pressurized air if air pressure is not relieved.

1. Check to be sure all air is disconnected from the gun
2. Be sure all pressure is relieved from the gun.
3. Disconnect the trigger guard by using a wrench to remove the nut securing the top of the trigger guard to the end cap on the gun's actuating cylinder.

Disassemble Gun into Modules

Note: If your Pro Gun™ is used for chopping, perform the two steps, A and B:

A. Detach the chopper assembly by removing the air tube that connects the chopper to the gun handle.

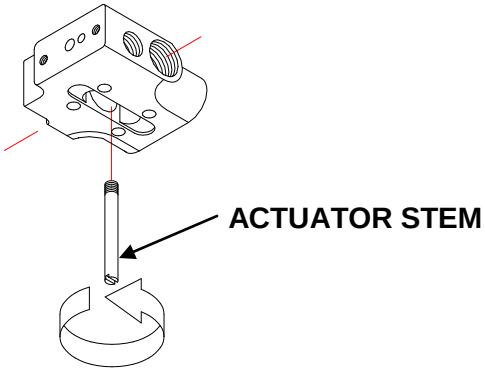
B. Remove the hex cap screw securing the chopper to the top of the gun block. Use caution not to lose the eccentric stud in the chopper mount.

1. Remove the four screws that secure the gun block to the actuator. Set gun block a side for now
2. Remove the two mounting screws which secure the handle to the actuator.
3. You have now disassembled the gun into modules. Next you will disassemble, clean, and reassemble each module.

Remove Actuating Stem

1. Unscrew the actuating stem from the valve rod. Tightly clamp the actuating stem into a soft jawed vise and rotate the whole gun block.

Note: The screw driver slot in the end of the actuating stem should not be used for removal as if it becomes damaged the stem will not fit into the actuator bushing. Make sure the actuating stem is smooth or it will wear out the actuator bushing.



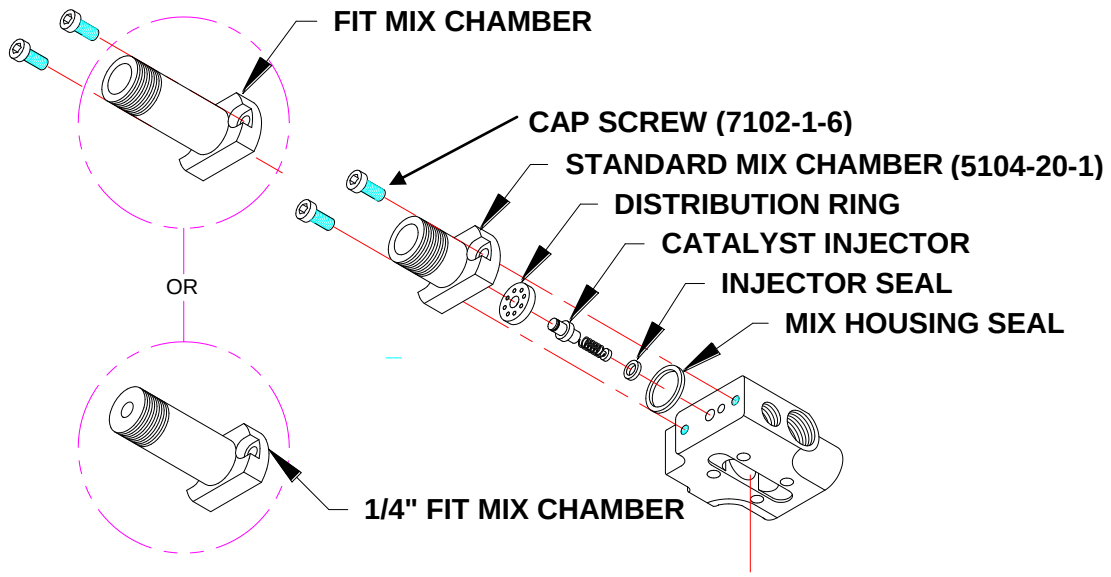
Remove & Disassemble Flush Valve Assembly

1. Unscrew the flush valve body from the gun block.
2. Remove the split seal from the flush valve body.
3. Remove the flush valve body from the flush valve neck.
4. Remove the flush valve seal from the flush valve body.
5. Unscrew the flush seal body (5104-23-1) from the flush valve button (5104-25-01).
6. Remove the spring (9203-2-3).
7. Use a scribe to remove the o-ring (O-K-008) from the flush valve button.
8. Remove the o-ring (O-A-007) from the flush seal body (5104-23-1).
9. Set parts aside for now or go down to flush valve assembly
10. Discard and replace the flush valve's o-rings and seals, after reading the note below.

Note: Do not replace o-ring (O-K-008) unless it is worn or damaged. This o-ring is designed for use with all solvents. In some cases O-K-008 o-ring can be replaced with the more economical o-ring (O-E-008).

Remove Mix Housing

1. Remove the nozzle cap from the mix housing.
2. Remove the nozzle from the cap.
3. Remove the mix housing (5104-20-1) by unscrewing the screws holding the mix housing to the gun block.
4. Pull the injector and injector seal out and set the injector assembly aside.
5. Use the turbulent mixer puller to remove the turbulent mixer by inserting the puller and giving a slight twist.
6. Use a blunt tool to push the distribution ring™ and housing seal out of the mix housing.
7. Inspect and clean the mix housing components with solvent.



Disassemble the Catalyst Injector Assembly

1. Unscrew the plunger retainer from the end of the injector plunger.
2. Remover spring (9203-2-2).
3. Remove the injector plunger from the injector body. Inspect injector plunger and injector body for dirt or damage.
4. Clean and reassemble.

Remove Hose Fittings

1. Remove and clean the catalyst fitting and o-ring on the rear of the gun block.

2. Remove and clean the resin fitting and o-ring on the rear of the gun block.

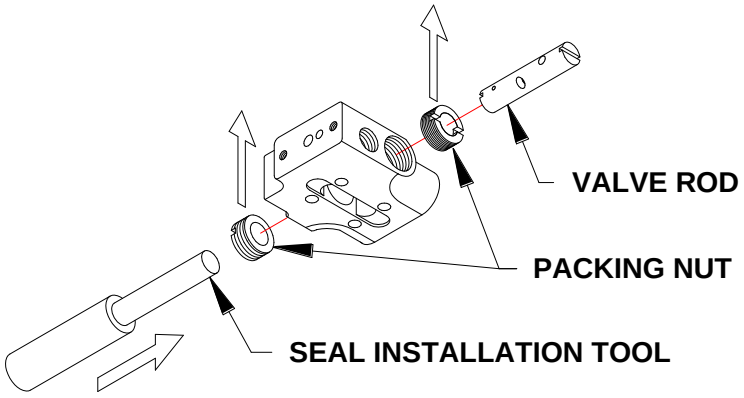
Remove Valve Rod

1. Use the magnetic handle and packing bit to unscrew the packing nuts (5104-8-1) from both the catalyst and resin side. Use caution not to damage the packing bit. If you are unable to remove the packing nut soak in a solvent or apply heat to the packing nuts.

2. Place the small end of the seal installation tool onto one end of the valve rod.

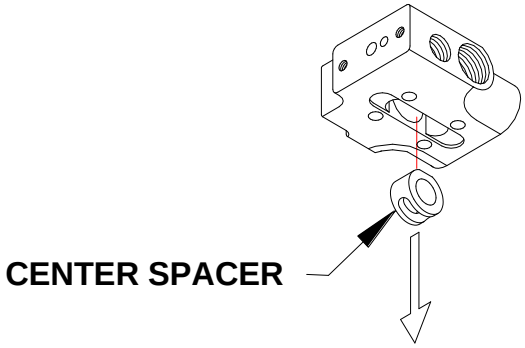
3. Use a rubber mallet or hammer to gently tap the valve rod out of the gun block.

4. Inspect the valve rod for damage; clean with solvent.



Remove Center Spacer

1. Use needle-nose pliers to remove the center spacer (5104-10-1).



Remove Catalyst and Resin Seals

1. Insert the seal installation tool into one of the side ports and gently tap it completely through the gun block with a rubber or hammer mallet. As the tool is tapped through the interior of the gun block it will remove the seal sets for both the resin and the catalyst sides.

2. Remove catalyst and resin seal (relief spacer and secondary seal) from the seal installation tool. Clean with solvent.

CAUTION: Keep the components of the catalyst side separate from the components of the resin side. Mixing the components could result in cross-contamination.

3. Clean the two relief spacers (5104-4-1) with solvent and allow to air dry.

4. Discard the seals and replace with new ones from repair kit.

Remove Check Valve on International Pro Guns

1. Remove the check valve on the side of the gun block

Or

Remove Catalyst Plug on Domestic Pro Guns

1. Remove the plug (5104-32-1) from the side of the gun block

2. Check o-ring (O-E-5-125) for damage

Note: This valve serves as a check valve for the catalyst system.

DANGER: If this valve must be replaced, contact Magnum Venus Products. These valves have undergone specific remanufacture at Magnum Venus Products for use with the Pro Gun™. Using a check valve not obtained directly from Magnum Venus Products may result in contamination and/or dangerous ignition of the catalyst.

Gun Block Assembly:

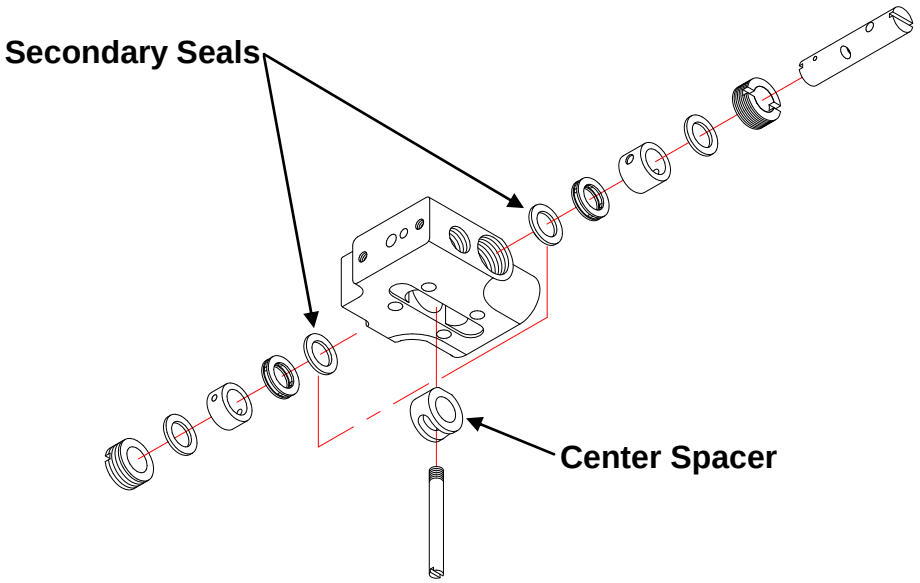
Clean Block Assembly

- Discard o-rings and seals.
- Clean remaining components with solvent and allow to air dry.
- You have now disassembled the gun block.

Install Secondary Seals

1. Place one of the secondary seals (5104-3-1) into the center of the gun block where the center spacer goes. Gently push the secondary seal into position with something flat, flush with the gun block. Use caution not to damage it the seal.

2. Repeat the process for the other secondary seal.



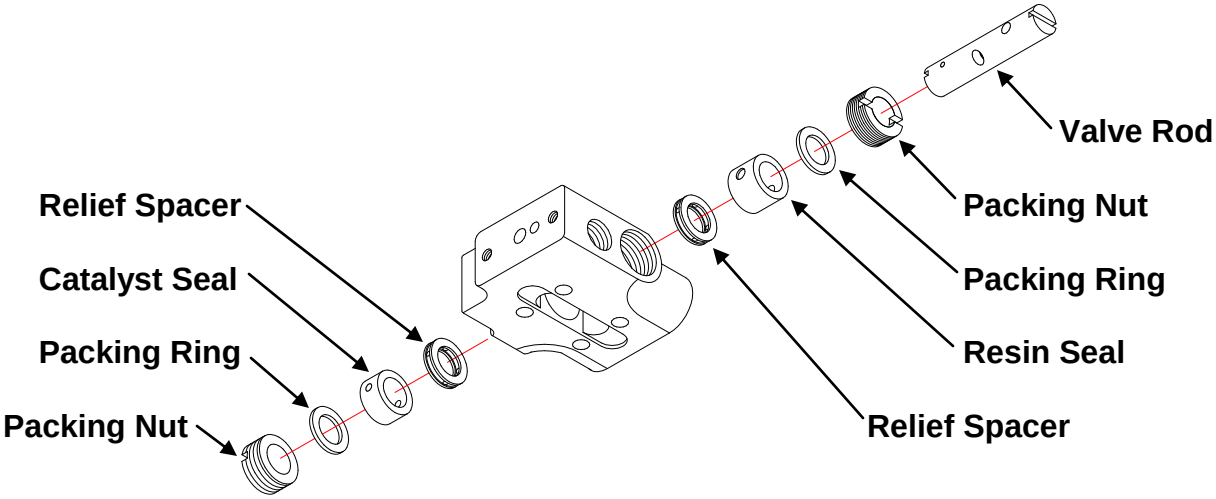
Reinstall Center Spacer

1. Place the center spacer (5104-10-1) in the gun block, making sure that the center spacer is aligned as accurately as possible with the slot facing up. Use caution not to damage the secondary seals, already installed

Reassemble Catalyst Components

1. Place the catalyst components onto the seal installation tool in the following order:
   - Packing ring (5104-7-1)
   - Catalyst seal (5104-6-1)
   - Relief spacer (5104-4-1)

Note: The hole in the catalyst seal should be aligned with the port in the gun block before inserting the seal installation tool into the gun block.



2. Insert the seal installation tool with the components on it into the catalyst side of the gun block. Press firmly, or tap with a rubber mallet, then pull the packing tool out of the gun block.

Note: Again before inserting the seal installation tool, align the holes in the catalyst seal with the holes in the gun block as closely as possible.

3. The catalyst components should be seated in the interior of the gun block against the center spacer.

4. Gently screw a packing nut (5104-8-1) into the catalyst side. Do not tighten.

Align Catalyst Seal

1. Hold the catalyst alignment tool (6705-3-1) (tapered drill bit) firmly with a pair of pliers.

2. Insert the catalyst alignment tool (tapered end first) into the gun block through the rear of the gun block

3. Gently press and move the alignment tool around until the holes in the catalyst seal aligns with the hole / port in the gun block.

Note: At this point, the catalyst side packing nut should only be hand tight.

Reassemble Resin Components

1. Place the resin components onto the seal installation tool in the following order:
   - Packing ring (5104-7-1)
   - Resin seal (5104-5-1)
   - Relief spacer (5104-4-1)

Note: Before inserting the packing tool, align the hole in the resin seal with the hole in the gun block as closely as possible

2. Insert the seal installation tool into the resin side of the gun block. Tap gently with a rubber mallet or hammer, and then pull the packing tool out of the gun block.

3. The resin components should be seated in the interior of the gun block against the center spacer.

4. Gently screw a packing nut (5104-8-1) into the resin side. Do not tighten.

Align Resin Seal

1. Hold the resin alignment tool (6705-4-1) (tapered drill bit) firmly with a pair of pliers.

2. Insert the resin alignment tool (tapered end first) into the gun block through the rear of the gun block.

3. Gently move the resin alignment tool inside the gun block so that the holes in the resin seal aligns with the hole / port in the gun block.

Note: At this point, the resin side packing nut should only be hand tight.

Install Valve Rod

1. Insert the valve rod (5104-2-1) into the gun block through the resin side. Use a packing tool to center the valve rod.

Note: Make sure that the valve rod is correctly aligned; the larger hole goes on the resin side, while the smaller hole goes on the catalyst side.

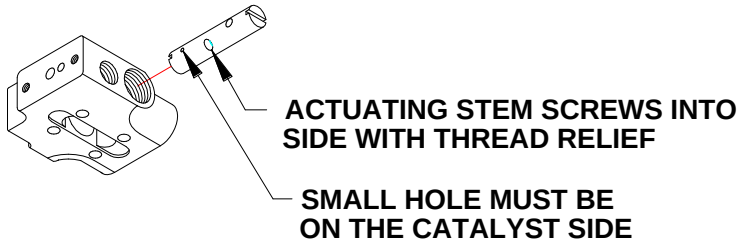
Note: The middle hole, into which the actuating stem will be inserted, must also be correctly aligned. One end of the hole has a relief; and this relief should face out of the gun block, as this is where the actuating stem will be installed.

Reinstall Actuating Stem

1. Screw the actuating stem (5104-11-1) into the valve rod (5104-2-1) thru the center spacer.

Note: Make sure the actuating stem is screwed into the side of the valve rod with the larger hole (thread relief).

2. Look down the front of the gun while moving the actuating stem back and forth. You should be able to see the holes open and close. Set the actuating stem so that the holes are closed.



Tighten Packing Nuts

1. Tighten both the resin and the catalyst packing nuts. Do not damage the packing bit
2. Move the actuating stem back and forth, opening and closing the gun.
3. Again tighten both the resin and the catalyst packing nuts.
4. Repeat the above tightening process one more time

Reinstall Hose Fittings

1. Reinstall the fitting and o-ring for the resin hose on the rear of the gun block.
2. Reinstall the catalyst fitting and o-ring on the rear of the gun block

Reinstall Check Valve on International Pro Guns

DANGER: To replace this valve, contact Magnum Venus Products. These valves have undergone specific remanufacture at Magnum Venus Products for the Pro Gun ™. Using a check valve not obtained directly from Magnum Venus Products may result in contamination and / or dangerous ignition of the catalyst.

1. Reinstall the check valve (5104-04-01) and o-ring (O-S-5-125) into the side port on the catalyst side of the gun block.

Or

Reinstall Catalyst Plug on Domestic Pro Guns

2. Thread the catalyst plug (5104-32-1) and o-ring (O-S-5-125) into the side port on the catalyst side of the gun block

Reassemble Flush Valve

Note: the following procedures are for the standard flush valve assembly if you have the Auto / Manual Flush Valve (58742-1) installed some of the part numbers mentioned below will change.

1. Place the o-ring (O-K-008) on the flush valve button (5104-25-1).
2. Insert the spring (9203-2-3) onto the flush valve button.
3. Push the button and spring into the flush valve body (5104-24-1).
4. Place the o-ring (O-A-007) on the flush seal body (5104-23-1).
5. Insert a flush seal body (5104-23-1) into the end of the flush valve body and screw it onto the button.
6. Place a flush valve seal (5104-26-1) on the flush valve body.
7. Install the flush valve body (5104-24-1) into the flush valve neck (5104-22-1).
8. Install the split seal (5104-21-1) onto the flush valve body (5104-24-1).
9. Screw the flush valve assembly (5104-01-01) into the front side port on the resin side of the gun block

Note: If using o-ring part number O-K-008 (o-ring is used on the flush button), you do not need to replace the o-ring unless it is showing obvious signs of wear or damage. This o-ring is specially designed for use with all solvents. In some cases O-K-008 o-ring can be replaced with the more economical o-ring (O-E-008)

Optional Flush Valve Configurations:

There are several variations on the flush valve assembly to include air / solvent purge and high pressure flush. Check the parts drawing for the valve assembly installed on your gun assembly.

- 58742-1 Automatic Flush Valve Assembly
- 58742-1-INT Automatic Flush Valve Assembly – International
- 5104-01-01 Standard Flush Valve Assembly
- SAPV-1000-INT Solvent / Air Purge Assembly – International
- SAPV-1000 Solvent / Air Purge Assembly
- BVF-1000 Ball Valve Flush Assembly – for high pressure flush

Assemble Mix Housing

1. Install the distribution ring (5104-17-1 Standard) into the mix housing

Note: Be sure the distribution ring is positioned correctly. The chamfered or beveled edge of the hole should face away from the turbulent mixer and toward the gun block.

Note: Be sure the holes in the distribution ring are clean and free of debris or hardened material.

2. Position the mix housing seal into the mix housing, against the distribution ring.

3. Insert the catalyst injector assembly (5104-03-01) and injector seal into the center hole of the distribution ring. The spring should be facing up, as it will go into the gun block and the injector seal will be against the gun block.

4. Use the socket cap screws (7102-1-6) to attach the mix housing to the gun block

WARNING: Screws and fasteners provided with this Pro Gun ™ are specially designed for this equipment. Use only Magnum Venus Product replacement parts, or warranty may be voided.

5. Insert the turbulent mixer into the mix housing.

6. Apply some red grease to the threads of the mix housing and nozzle cap. This will make them easier to remove later.

7. Install the nozzle into the nozzle cap (8704-4-1). See above for nozzle selection.

8. Screw the nozzle and nozzle cap onto the mix housing.

Mix Housing Options

- Standard Mix Housing (5104-20-1) – Use with all turbulent mixers and most applications.
- FIT Mix Housing (VPG-1001) – Use with FIT style spray tips. Uses mixer VPG-1003.
- FIT Low Flow Mix Housing (VPG-1001-1/4) – replacement mixer TRT-1018-1/4

Distribution Ring Selection

There are three different distribution rings and they are as follows:

- Standard Distribution Ring 5104-17-1 (58607-1) – Used for most applications where outputs are not critical.
- Filled Resin Distribution Ring 5104-18-1 (58701-1) – Used in application where the resin is filled above 20 percent. Use with high filler loads and high outputs.
- Critical Mix Distribution Ring 5104-19-1 (58703-1) – Use in low output application, where it is important to restrict flow.

Turbulent Mixer Selection

There are two different turbulent mixers, in two different materials.

- Standard Turbulent Mixer 5107-27-3 – Use for most applications where outputs are not critical. Use with chopper and saturator applications.
- Glass Filled Standard Turbulent Mixer 5107-27-6 – Use with abrasive materials such as putties and filled resin applications where durability is required. Use with chopper and saturator applications.
- Critical Mix Turbulent Mixer 5107-27-2 – Use for low output applications such as gel coat. In low flow application the critical mix turbulent mixer will work best.
- Glass Filled Critical Mix Turbulent Mixer 5107-27-5 – Use in low flow applications where the material is abrasive and durability is required.

Actuator Rebuild:

Actuator Disassembly

1. Remove the two o-rings (O-V-013) from the underside of the cylinder body (58631-1).
2. Unscrew the cylinder caps (5106-4-1) from each end of the cylinder body.
3. Remove the o-ring (O-V-020) from each of the cylinder caps
4. Remove the actuating piston (5106-7-1) by pushing it out the back end (long end) of the cylinder body with your fingers or a blunt tool.
5. Remove the actuating bushing (5106-5-1) from the piston with the packing assembly rod.

CAUTION: Avoid damaging the actuating piston when using the scribe in the next step.

6. Use a scribe to remove the o-ring (O-V-020) from the actuating piston.

Note: O-rings should be replaced each time the gun is disassembled.

Clean Components

- Discard the used o-rings
- Clean the cylinder assembly components with solvent and allow to air dry. Do not soak actuating piston or cylinder caps in solvent as they will swell.

Assemble Auto Pro Gun Actuator Cylinder

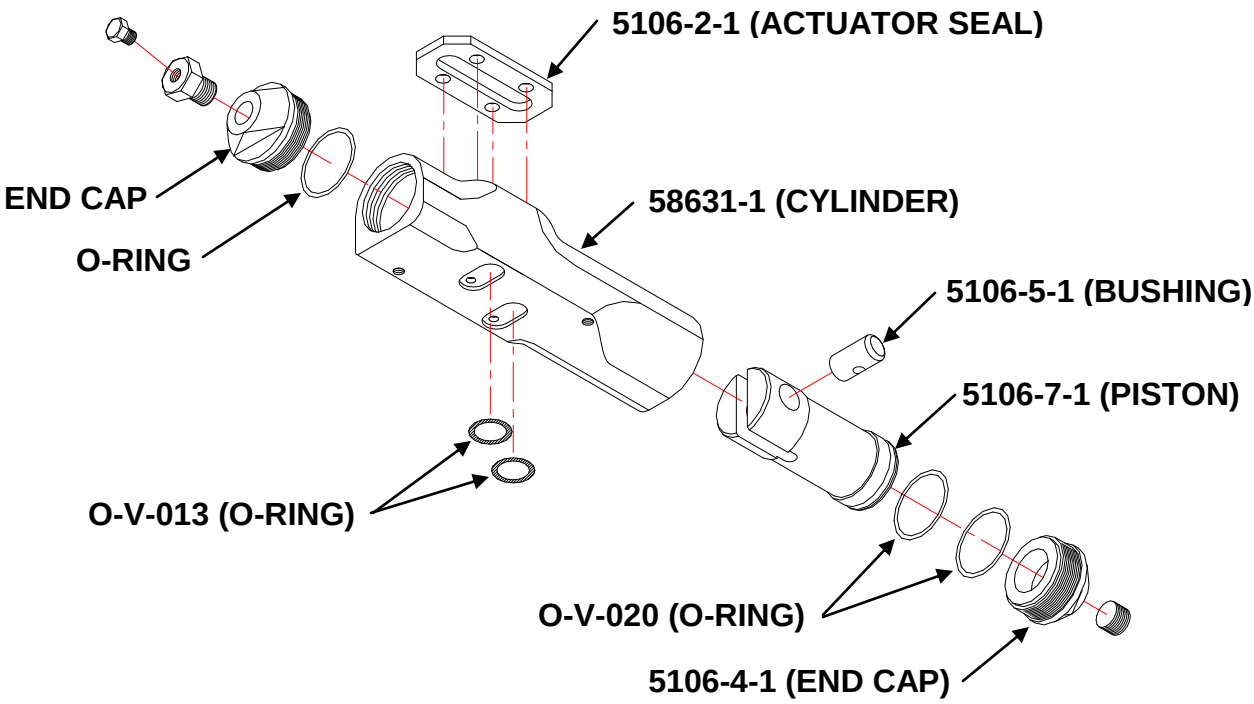
1. Place a new o-ring (O-V-020) on the actuating piston (5106-7-1).

2. Insert the actuating bushing (5106-5-1) into the actuating piston.

Note: The hole in the actuating bushing must be facing up so the bushing hole can receive the actuating stem when the gun block is assembled.

3. Use MVP Pro Gun Oil (6706-3-1) to lubricate the interior of the cylinder body and the actuating piston.

4. Insert the actuating piston (5106-7-1) into the cylinder body (58631-1).



Note: Install the actuating piston into the cylinder so that the bushing is on the high side of the piston centerline. Use caution not to damage the o-ring on the piston while installing it into the cylinder body.

5. Place new o-rings (O-V-013) in the grooves on the underside of the cylinder body.

6. Install new an o-ring (O-V-020) on each of the cylinder caps.

7. Reinstall the two cylinder caps on to the cylinder body.

Assemble Auto Pro Gun Modules

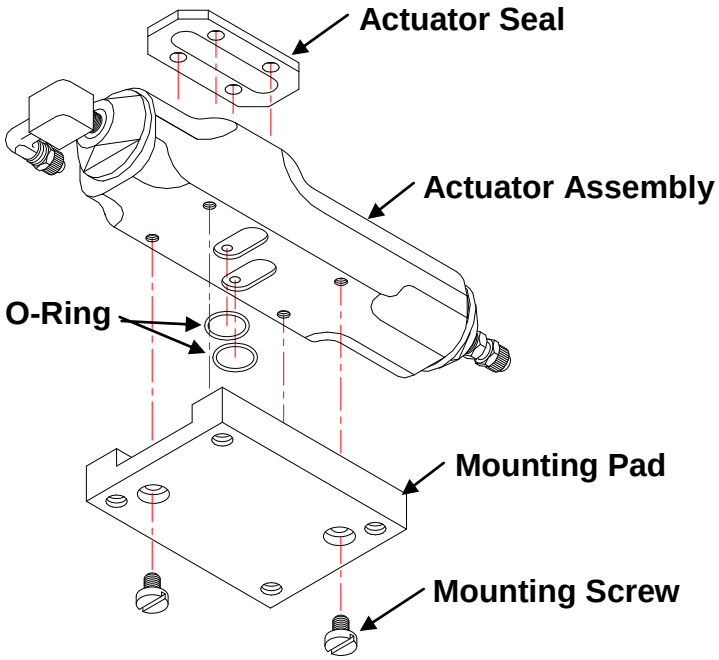
1. Install the Actuator Seal onto the actuator assembly.

Note: The hole in the actuating bushing of the actuator must be facing up so the bushing hole can receive the actuating stem of the gun block.

2. Using the four mounting screws (5106-6-1) secure the gun block to the actuator.

Note: The actuating stem on the gun block must be in the hole of the actuator bushing. If you are unsure, remove the front end cap of the actuator and look.

3. Install the mounting pad onto the actuator using the two screws.



Mounting Chopper

Note: If your Auto Pro Gun™ is used for chopping, perform the two steps, A and B:

A. Install the hex cap screw securing the chopper to the top of the gun block. Be sure to install the eccentric stud in the chopper mount.

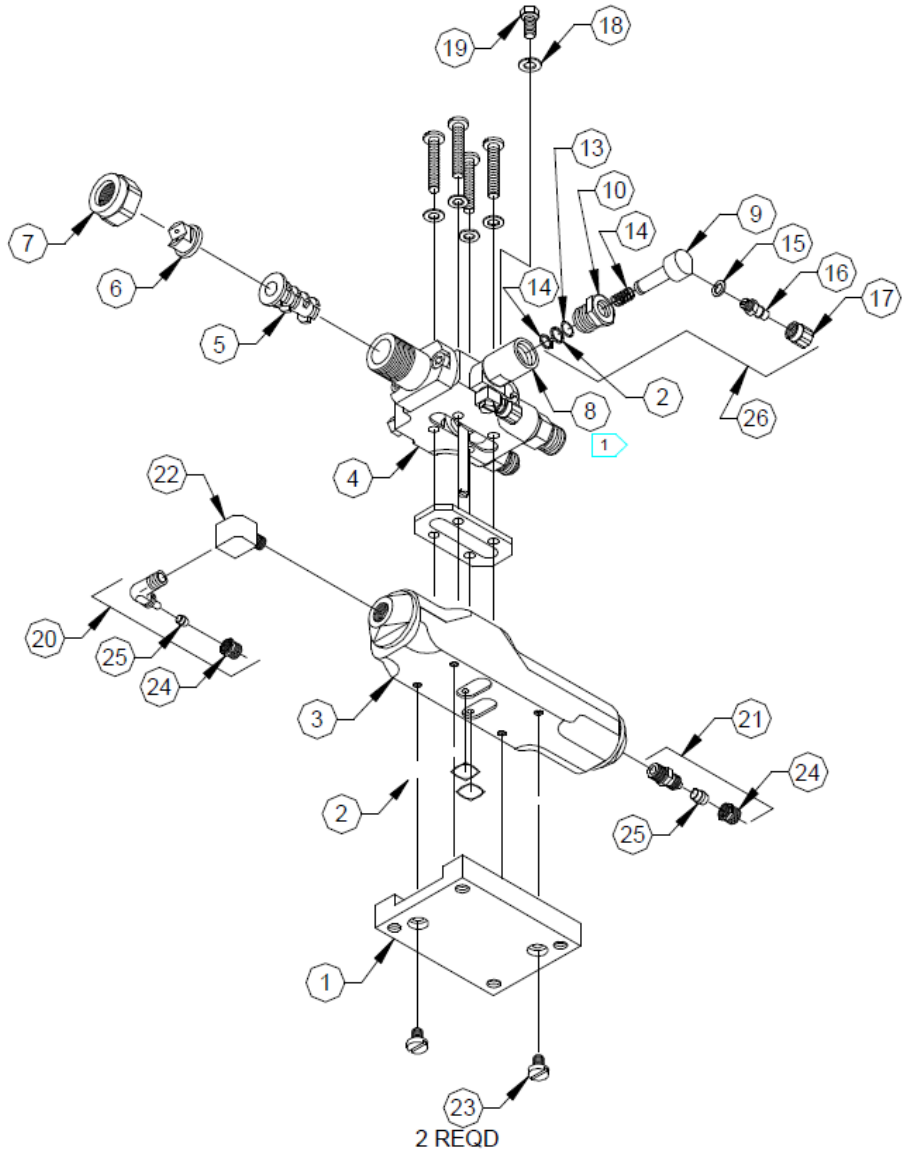
B. Attach the air tube that connects the chopper to the gun handle.

Parts Drawings:

58685-1	AUTO PRO GUN ASSEMBLY
CPG-1000-A	AUTO PRO GUN ASSEMBLY
CPG-1000-A-INT	AUTO PRO GEL COAT GUN – INTERNATIONAL
CPG-2000-A	AUTO PRO GEL COAT GUN – FIT
CPG-2000-A-INT	AUTO PRO GEL COAT GUN – INTERNATIONAL FIT
CPC-1000-A	AUTO PRO CHOPPER GUN
CPC-1000-A-INT	AUTO PRO CHOPPER GUN – INTERNATIONAL
CPC-1000-A-INV	AUTO PRO GUN ASSEMBLY – INNOVATOR
CPC-2000-A	AUTO PRO CHOPPER GUN – FIT
CPC-2000-A-INT	AUTO PRO CHOPPER GUN – INTERNATIONAL FIT
CPT-2000-A	AUTO PRO GUN ASSEMBLY – TAPE MACHINE
PRTM-DG-3000-A	AUTO PRO GUN ASSEMBLY – INNOVATOR DISPENSE GUN

58602-1	PRO GUN BLOCK ASSEMBLY
58604-1	PRO GUN ACTUATOR ASSEMBLY
CPC-1100-INV	PRO GUN BLOCK ASSEMBLY – INNOVATOR
CPC-1200-A-X	PRO GUN ACTUATOR ASSEMBLY
PRTM-DG-1200-A	PRO GUN ACTUATOR ASSEMBLY – DISPENSE GUN
5104-00-X-A	AUTO PRO GUN BLOCK ASSEMBLY
5104-00-X-A-INT	AUTO PRO GUN BLOCK ASSEMBLY – INTERNATIONAL
VFTC-4100-X-A	AUTO PRO GUN BLOCK ASSEMBLY – FIT
VFTC-4100-X-A-INT	AUTO PRO GUN BLOCK ASSEMBLY – FIT INTERNATIONAL
58742-1	AUTOMATIC FLUSH VALVE ASSEMBLY
58742-1-INT	AUTOMATIC FLUSH VALVE ASSEMBLY – INTERNATIONAL

6702-016-01-A	REPAIR KIT – PRO GUN BLOCK – GUN BLOCK ONLY
CPT-2000-A-RK	REPAIR KIT – AUTO PRO GUN
PRTM-DG-3000-A-RK	REPAIR KIT – DISPENSE GUN



1 REPLACE 58656-1 FLUSH BODY WITH 58681-1 AUTO FLUSH BODY.

MAGNUM VENUS PRODUCTS

Auto Pro Gun Assembly	58685-1

REV. A = D58685-1 WAS DOC.# 12123-1

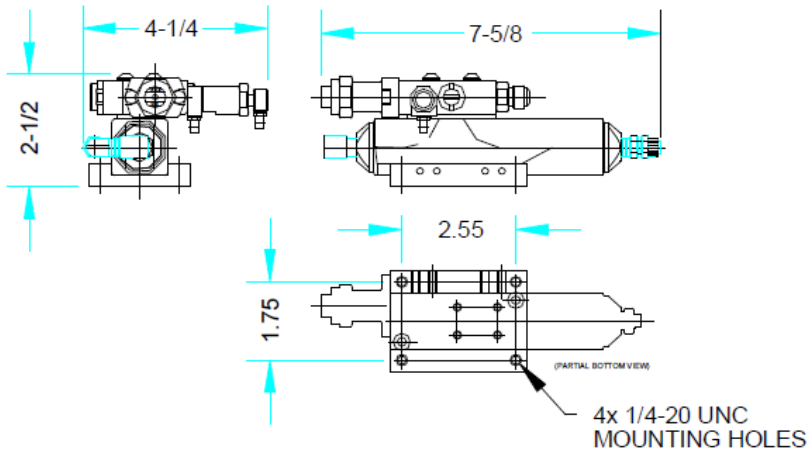
Auto Pro Gun Assembly 58685-1

PARTS LIST

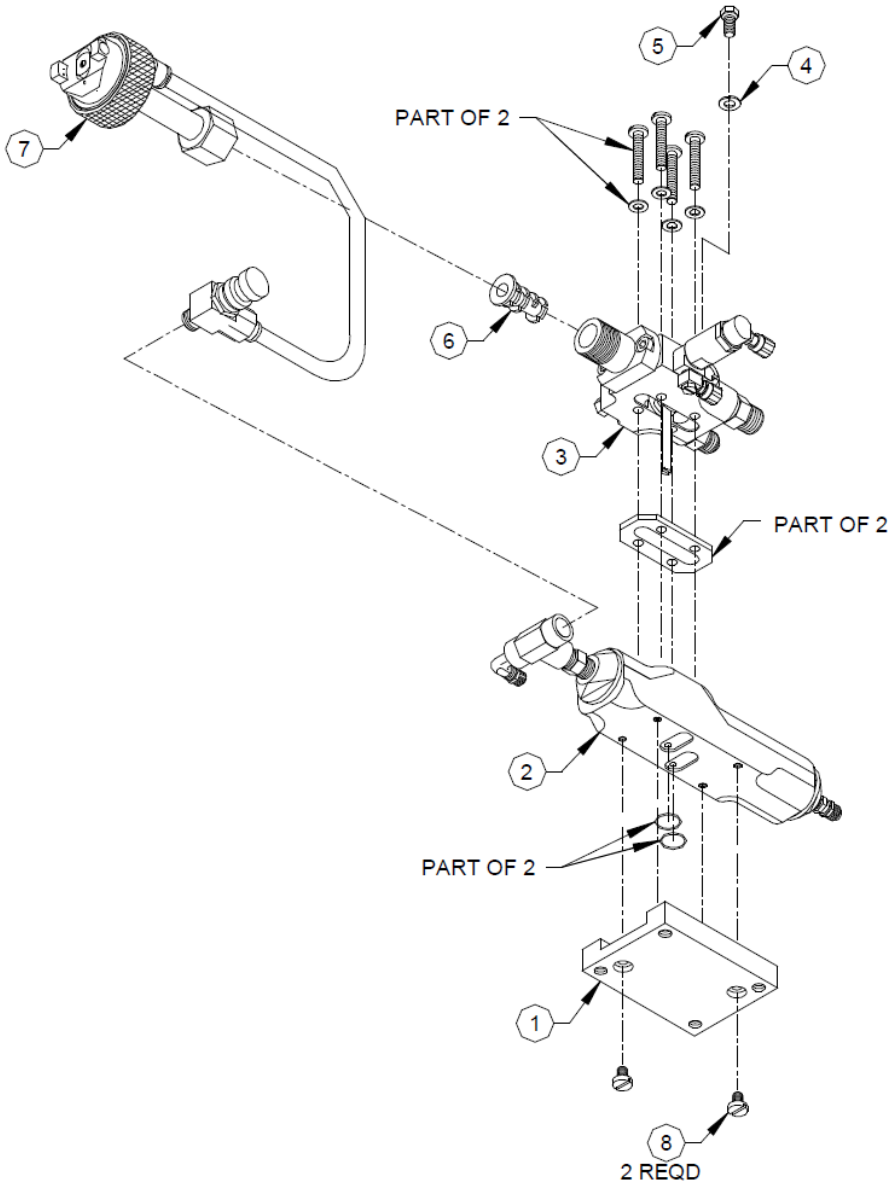
ITEM	PART NO.	QTY	DESCRIPTION
1	58704-1	1	MOUNTING PAD - PRO GUN
2	58718-1	1	BACK UP RING
3	58604-1	1	ACTUATOR ASSEMBLY
4	58602-1	1	GUN BLOCK ASSEMBLY
1 8	58681-1	1	AUTO FLUSH VALVE BODY
9	58716-1	1	PUSH STEM
10	58717-1	1	MANUAL / AUTO FLUSH BODY
12	00973	1	GRIP RING
13	01019	1	O-RING
14	04356	1	SPRING
15	7304-3-1	1	NYLON SEAL
16	7701-6-3	1	BARBED FITTING
17	7701-2-1	1	HOSE CLAMP
18	7202-4-8	1	LOCK WASHER
19	7101-1-4	1	HEX CAP SCREW
20	MPH-2534	1	MALE ELBOW POLY FITTING
21	7701-6-14	1	STRAIGHT POLY FITTING
22	00667	1	COMPACT ELBOW
23	02806-2	2	SLOTTED PAN HEAD SCREW
	M6707-1-1	1	MANUAL - SUPERPRO GUNS

OPTIONAL PARTS AND ASSEMBLIES

ITEM	PART NO.	QTY	DESCRIPTION
5	5107-27-3	1	STD TURBULENT MIXER
5A	5107-27-2	1	CRITICAL TURBULENT MIXER
6	T-002552C	1	SPRAY NOZZLE .052 x 50
7	8704-4-1	1	NOZZLE CAP
24	7701-6-12	2	POLY NUT
25	00437	2	FERRULE
26	58715-1	1	AUTO /MANUAL FLUSH



NOTE: WEIGHT (AS SHOWN) = 835 GRAMS.



MAGNUM VENUS PRODUCTS

Auto Pro Gun Assembly	CPG-1000-A-INT

REV. - 03/07/06 BT2

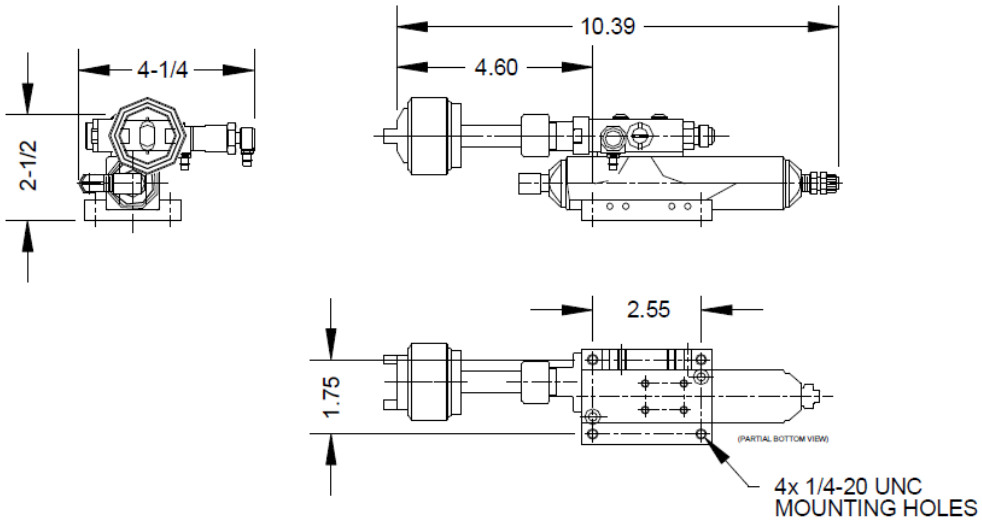
Auto Pro Gun Assembly CPG-1000-A-INT

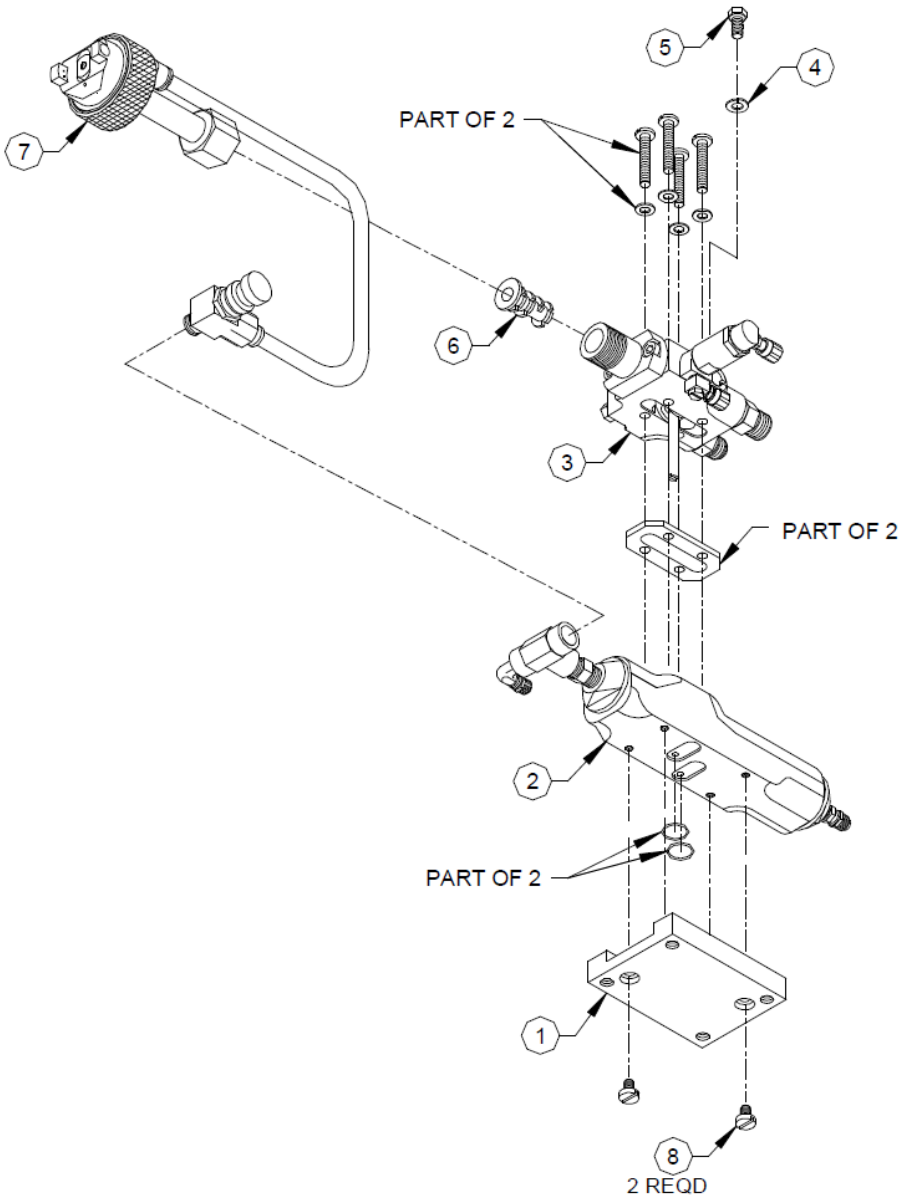
PARTS LIST

ITEM	PART NO.	QTY	DESCRIPTION
1	58704-1	1	MOUNTING PAD - PRO GUN
2	CPC-1200-A-2	1	ACTUATOR ASSEMBLY
3	5104-00-01-A-INT	1	GUN BLOCK ASSEMBLY
4	F-SW-04	1	LOCK WASHER
5	F-HB-04C-08	1	HEX BOLT
6	5107-27-2	1	TURBULENT MIXER
7	VPA-1000	1	AIR ASSIST / TIP ASSY.
8	02806-2	2	PAN HEAD SCREW

OPTIONAL PARTS AND ASSEMBLIES

ITEM	PART NO.	QTY	DESCRIPTION
3A	5104-00-03-A-INT	1	ABRASIVE GUN BLOCK





MAGNUM VENUS PRODUCTS

Auto Pro Gun Assembly	CPG-1000-A

REV. - 03/07/06 BT2

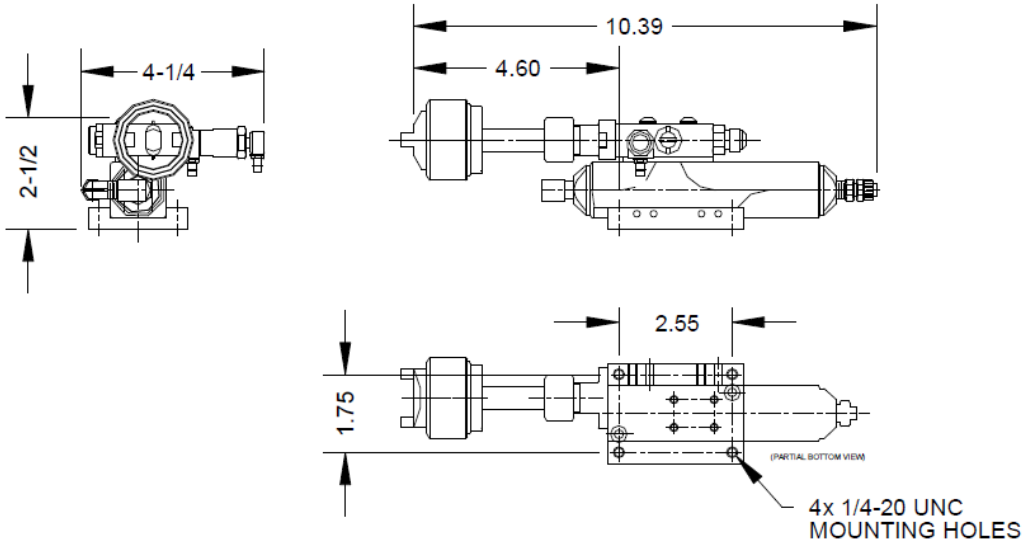
Auto Pro Gun Assembly CPG-1000-A

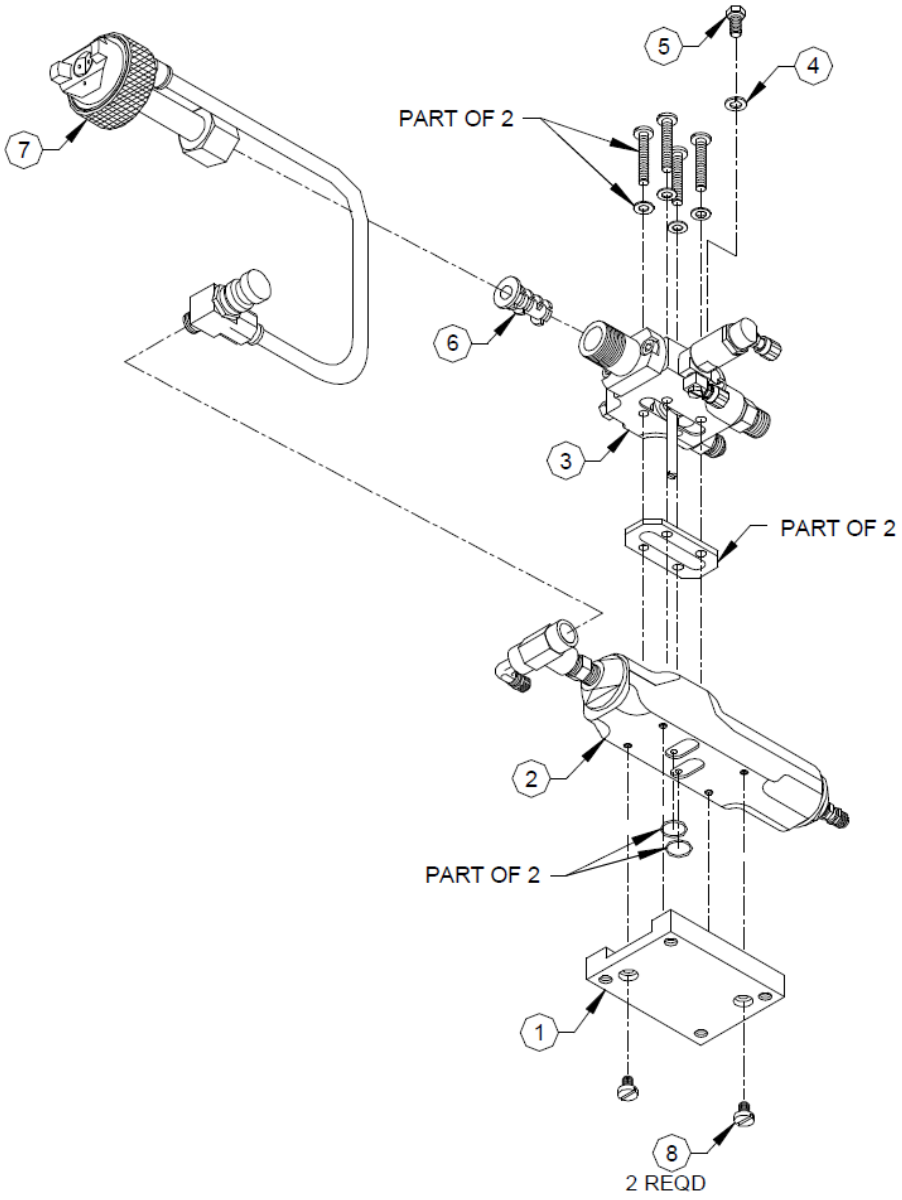
PARTS LIST

ITEM	PART NO.	QTY	DESCRIPTION
1	58704-1	1	MOUNTING PAD - PRO GUN
2	CPC-1200-A-2	1	ACTUATOR ASSEMBLY
3	5104-00-01-A	1	GUN BLOCK ASSEMBLY
4	F-SW-04	1	LOCK WASHER
5	F-HB-04C-08	1	HEX BOLT
6	5107-27-2	1	TURBULENT MIXER
7	VPA-1000	1	AIR ASSIST / TIP ASSY.
8	02806-2	2	PAN HEAD SCREW

OPTIONAL PARTS AND ASSEMBLIES

ITEM	PART NO.	QTY	DESCRIPTION
3A	5104-00-03-A	1	ABRASIVE GUN BLOCK





MAGNUM VENUS PRODUCTS

Auto Pro Gun Assembly	CPG-2000-A-INT

REV. - 03/07/06 BT2

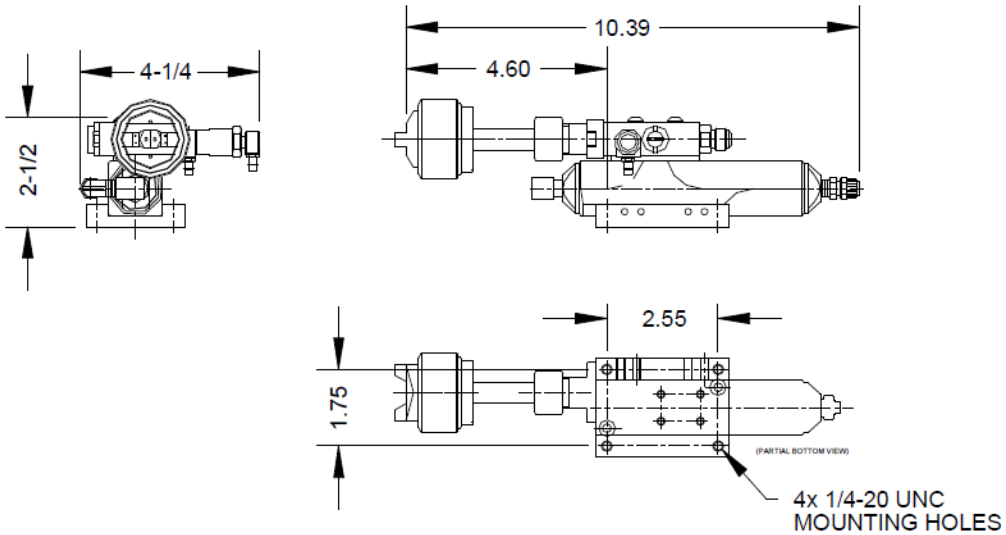
Auto Pro Gun Assembly CPG-2000-A-INT

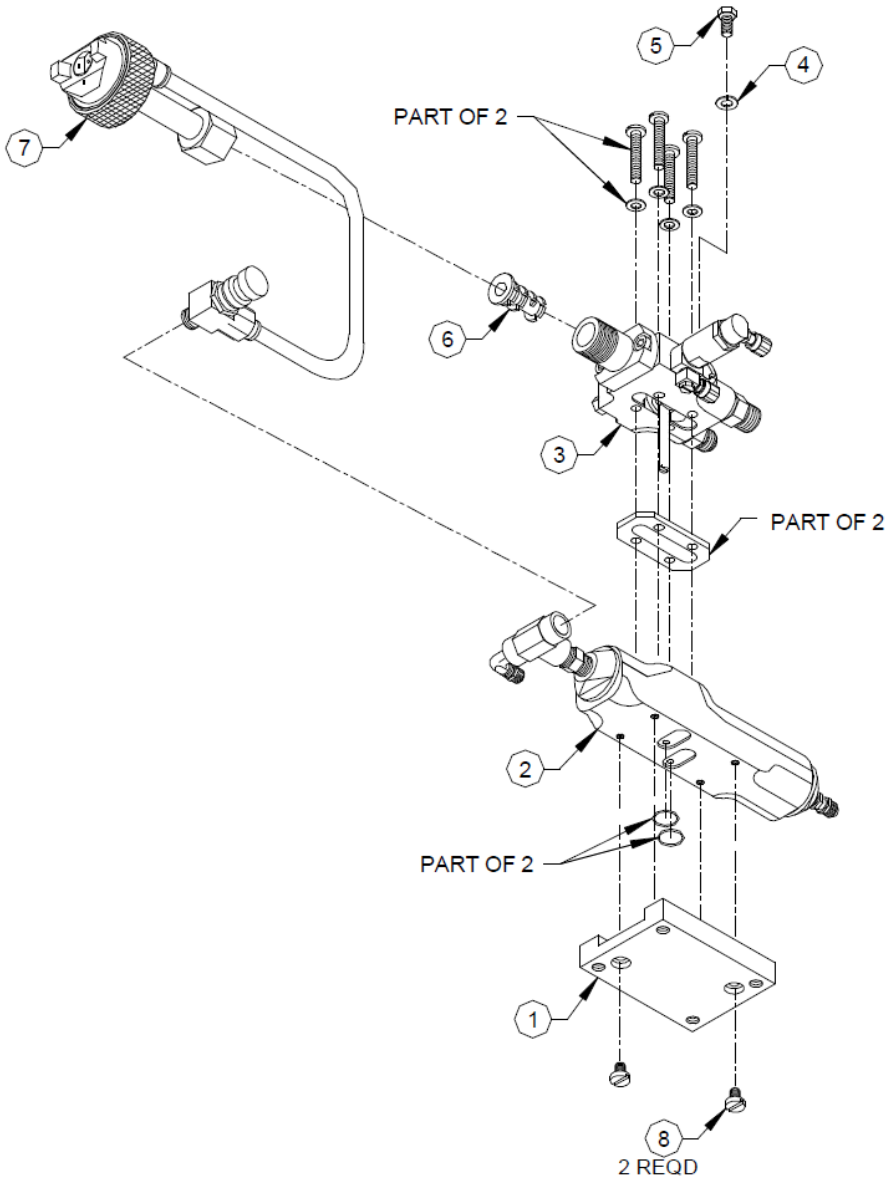
PARTS LIST

ITEM	PART NO.	QTY	DESCRIPTION
1	58704-1	1	MOUNTING PAD - PRO GUN
2	CPC-1200-A-2	1	ACTUATOR ASSEMBLY
3	5104-00-01-A-INT	1	GUN BLOCK ASSEMBLY
4	F-SW-04	1	LOCK WASHER
5	F-HB-04C-08	1	HEX BOLT
6	5107-27-2	1	TURBULENT MIXER
7	VPA-1000-VFIT	1	AIR ASSIST / TIP ASSY.
8	02806-2	2	PAN HEAD SCREW

OPTIONAL PARTS AND ASSEMBLIES

ITEM	PART NO.	QTY	DESCRIPTION
3A	5104-00-03-A-INT	1	ABRASIVE GUN BLOCK





MAGNUM VENUS PRODUCTS

Auto Pro Gun Assembly	CPG-2000-A

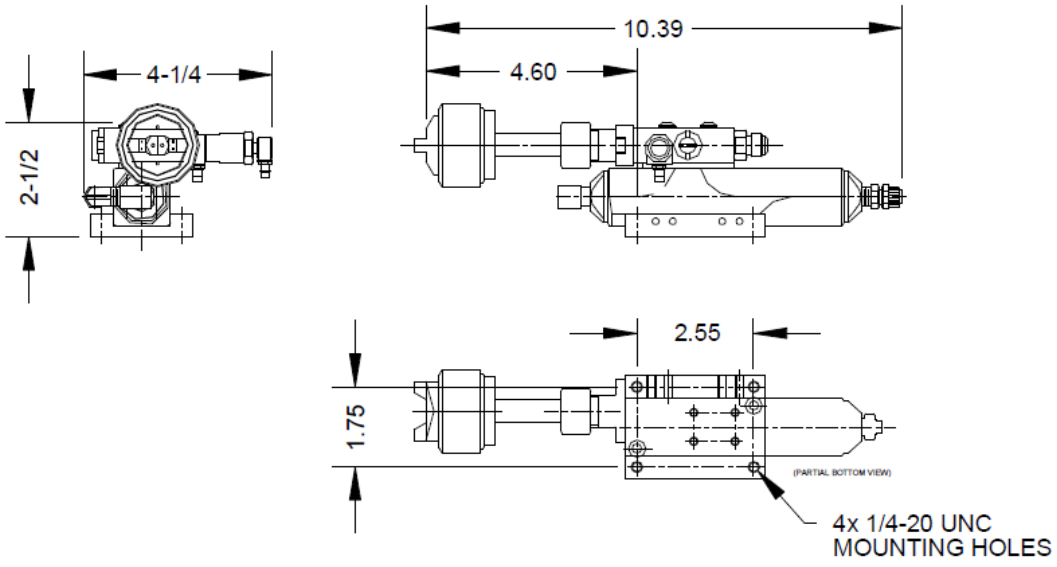
REV. - 03/07/06 BT2

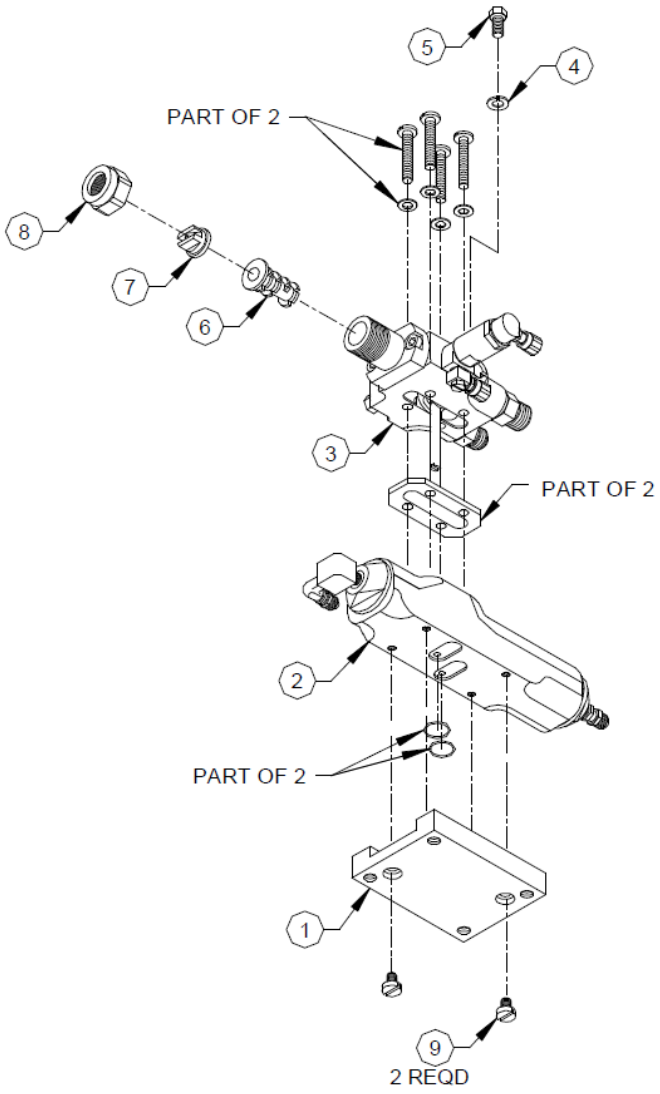
Auto Pro Gun Assembly CPG-2000-A
PARTS LIST

ITEM	PART NO.	QTY	DESCRIPTION
1	58704-1	1	MOUNTING PAD - PRO GUN
2	CPC-1200-A-2	1	ACTUATOR ASSEMBLY
3	5104-00-01-A	1	GUN BLOCK ASSEMBLY
4	F-SW-04	1	LOCK WASHER
5	F-HB-04C-08	1	HEX BOLT
6	5107-27-2	1	TURBULENT MIXER
7	VPA-1000-VFIT	1	AIR ASSIST / TIP ASSY.
8	02806-2	2	PAN HEAD SCREW

OPTIONAL PARTS AND ASSEMBLIES

ITEM	PART NO.	QTY	DESCRIPTION
3A	5104-00-03-A	1	ABRASIVE GUN BLOCK





MAGNUM VENUS PRODUCTS

Auto Pro Gun Assembly	CPC-1000-A

REV. - 03/07/06 BT2

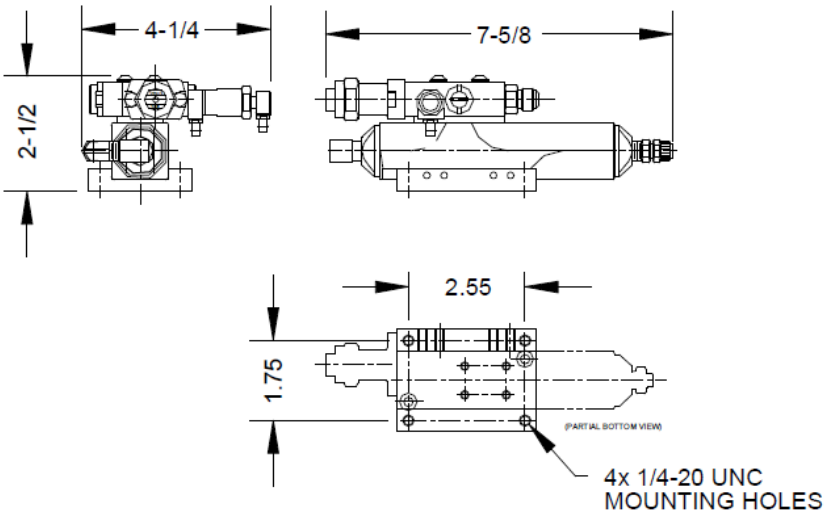
Auto Pro Gun Assembly CPC-1000-A

PARTS LIST

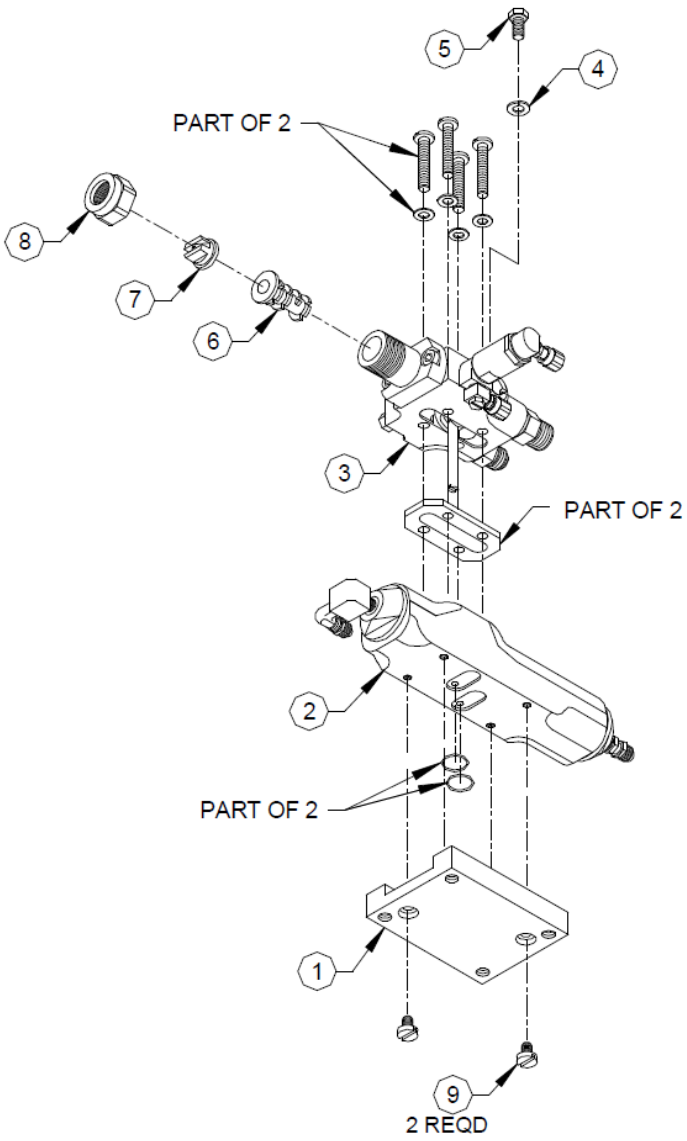
ITEM	PART NO.	QTY	DESCRIPTION
1	58704-1	1	MOUNTING PAD - PRO GUN
2	CPC-1200-A	1	ACTUATOR ASSEMBLY
3	5104-00-01-A	1	GUN BLOCK ASSEMBLY
4	F-SW-04	1	LOCK WASHER
5	F-HB-04C-08	1	HEX BOLT
6	5107-27-3	1	STD TURBULENT MIXER
7	T-002552C	1	SPRAY NOZZLE .052 X 50
8	8704-4-1	1	NOZZLE CAP
9	02806-2	2	PAN HEAD SCREW

OPTIONAL PARTS AND ASSEMBLIES

ITEM	PART NO.	QTY	DESCRIPTION
3A	5104-00-03-A	1	ABRASIVE GUN BLOCK
6A	5107-27-2	1	CRITICAL TURBULENT MIXER



NOTE: WEIGHT (AS SHOWN) = 835 GRAMS.



MAGNUM VENUS PRODUCTS

Auto Pro Gun Assembly (International)	CPC-1000-A-INT

REV. - 03/07/06 BT2

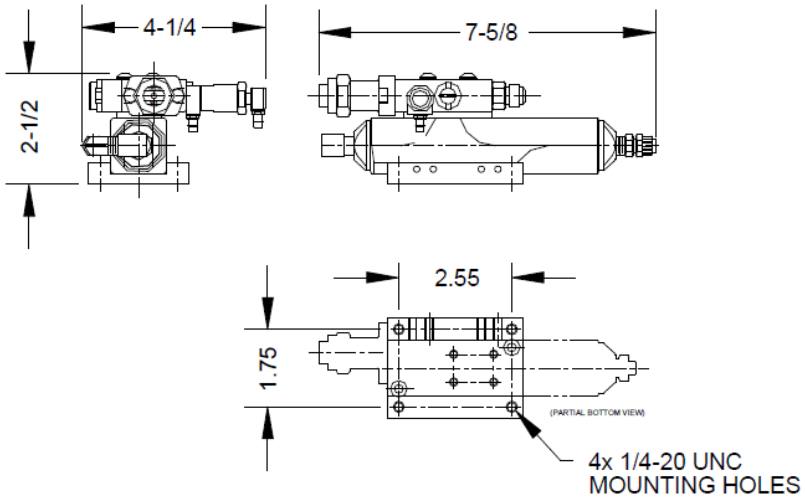
Auto Pro Gun Assembly CPC-1000-A-INT

PARTS LIST

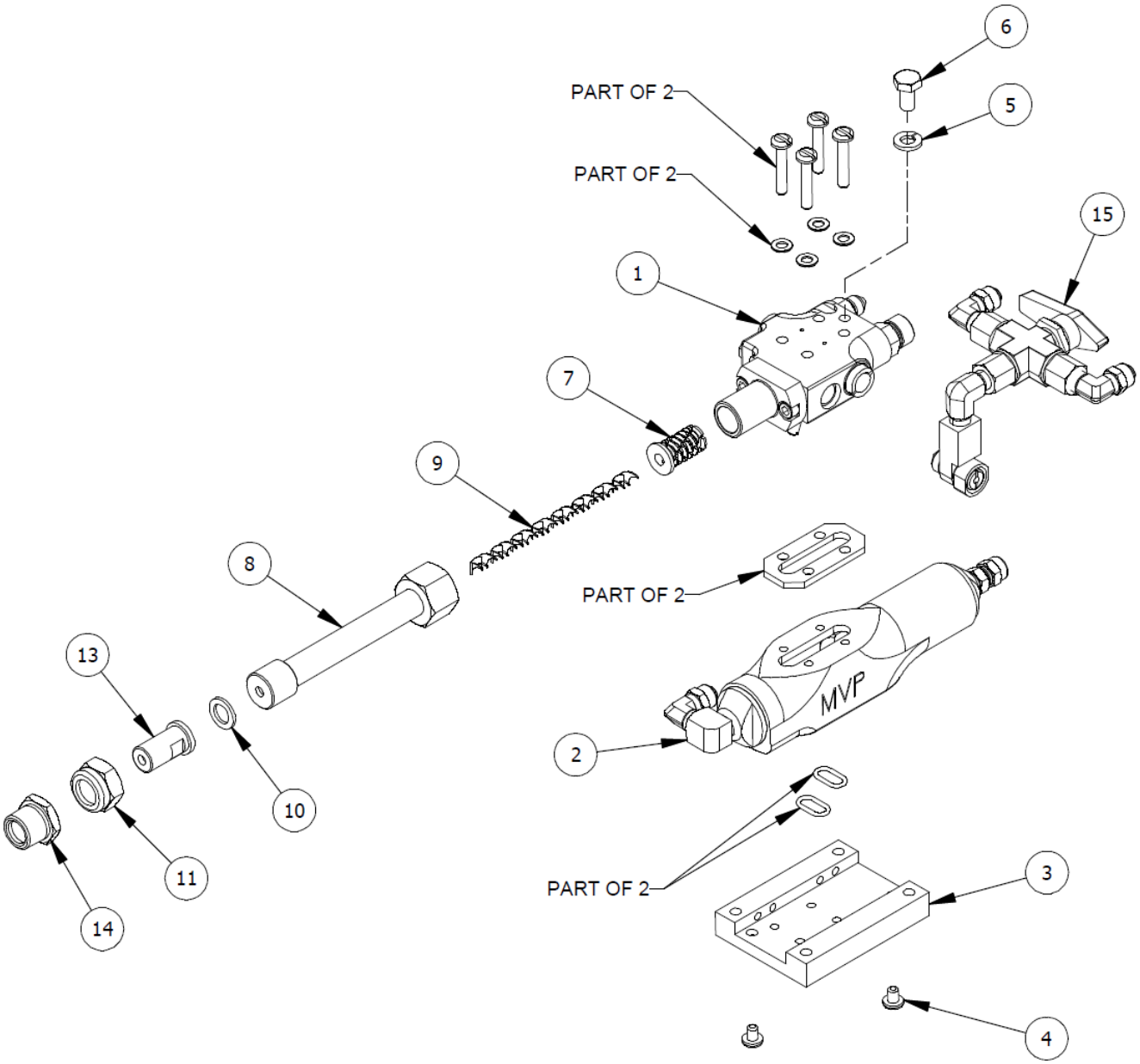
ITEM	PART NO.	QTY	DESCRIPTION
1	58704-1	1	MOUNTING PAD - PRO GUN
2	CPC-1200-A	1	ACTUATOR ASSEMBLY
3	5104-00-01-A-INT	1	GUN BLOCK ASSEMBLY
4	F-SW-04	1	LOCK WASHER
5	F-HB-04C-08	1	HEX BOLT
6	5107-27-3	1	STD TURBULENT MIXER
7	T-002552C	1	SPRAY NOZZLE .052 X 50
8	8704-4-1	1	NOZZLE CAP
9	02806-2	2	PAN HEAD SCREW

OPTIONAL PARTS AND ASSEMBLIES

ITEM	PART NO.	QTY	DESCRIPTION
3A	5104-00-03-A	1	ABRASIVE GUN BLOCK
6A	5107-27-2	1	CRITICAL TURBULENT MIXER



NOTE: WEIGHT (AS SHOWN) = 835 GRAMS.



MAGNUM VENUS PLASTECH

INNOVATOR AUTOMATIC DISPENSE GUN	CPC-1000-A-INV

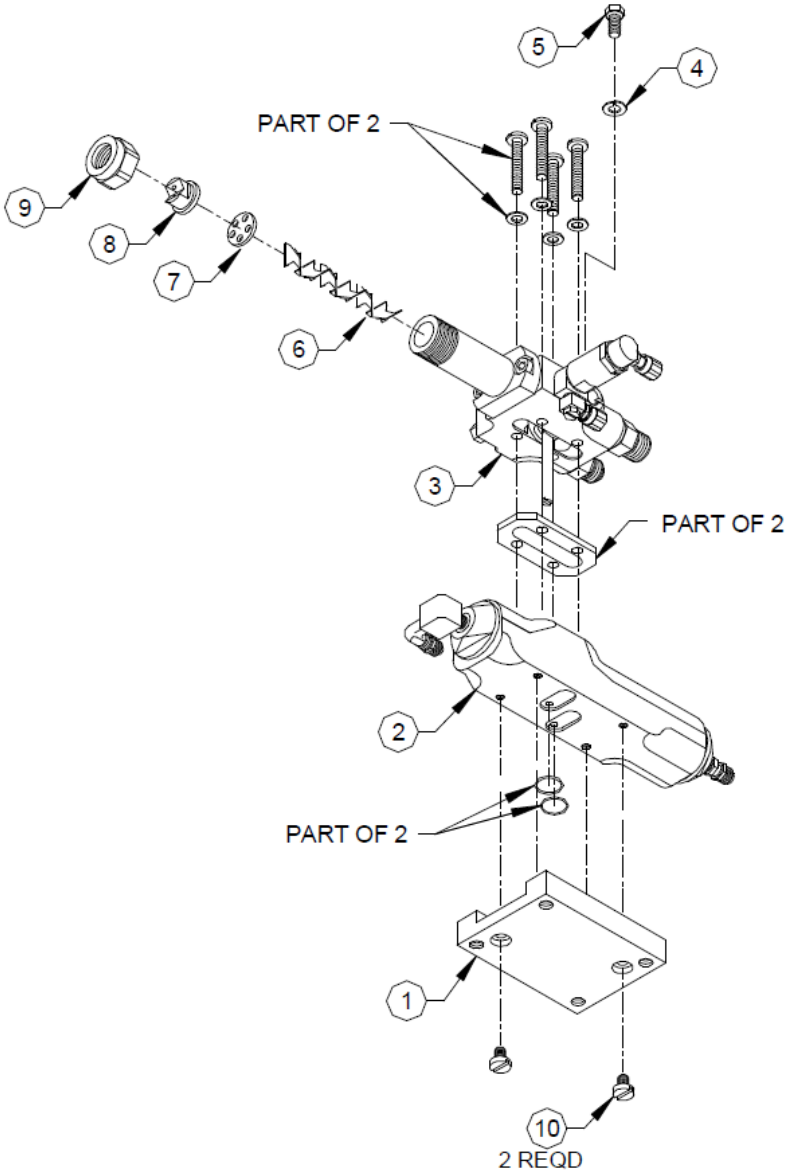
REV: SHEET 1 / 2 1/12/2010

Parts List			
ITEM	PART NUMBER	QTY	DESCRIPTION
1	CPC-1100-INV	1	INNOVATOR PRO GUN HEAD ASSEMBLY
2	CPC-1200-A	1	ACTUATOR ASSEMBLY
3	58704-1	1	MOUNTING PAD
4	02806-2	2	10-24 PAN HEAD SCREW
5	F-SW-04	1	LOCK WASHER
6	F-HB-04C-08	1	HEX BOLT
7	5107-27-3	1	TURBULENT MIXER
8	50091-1	1	MIXER HOUSING
9	8705-1-1	1	STATIC MIXER ELEMENT
10	02149-1	1	NOZZLE SEAL
11	8704-4-1	1	NOZZLE CAP
13	72711-1	1	NOZZLE ADAPTER
14	PF-RB-06-04	1	BUSHING
15	SAPV-500-INT	1	SOLVENT - AIR PURGE VALVE

MAGNUM VENUS PLASTECH

INNOVATOR AUTOMATIC DISPENSE GUN CPC-1000-A-INV

REV: SHEET 2 / 2 1/12/2010



MAGNUM VENUS PRODUCTS

Auto Pro Gun Assembly	CPC-2000-A

REV. - 03/07/06 BT2

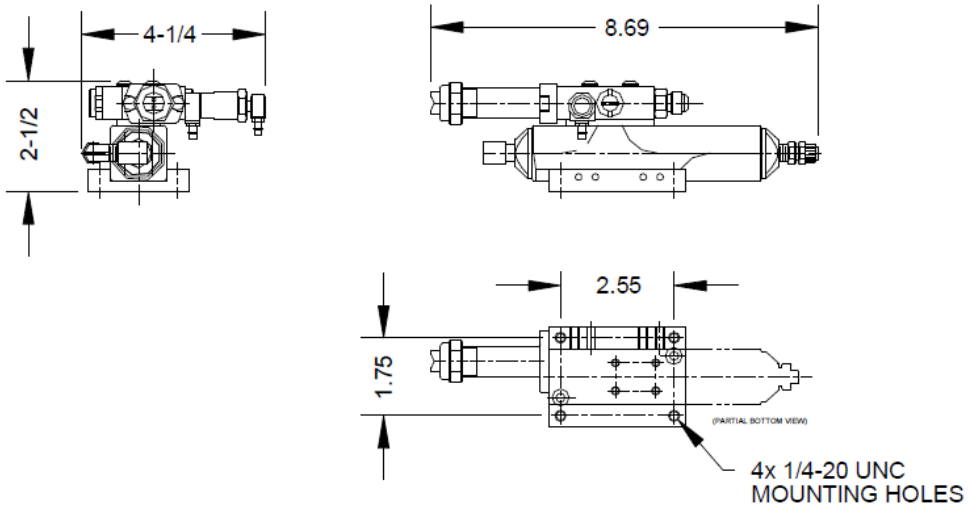
Auto Pro Gun Assembly CPC-2000-A

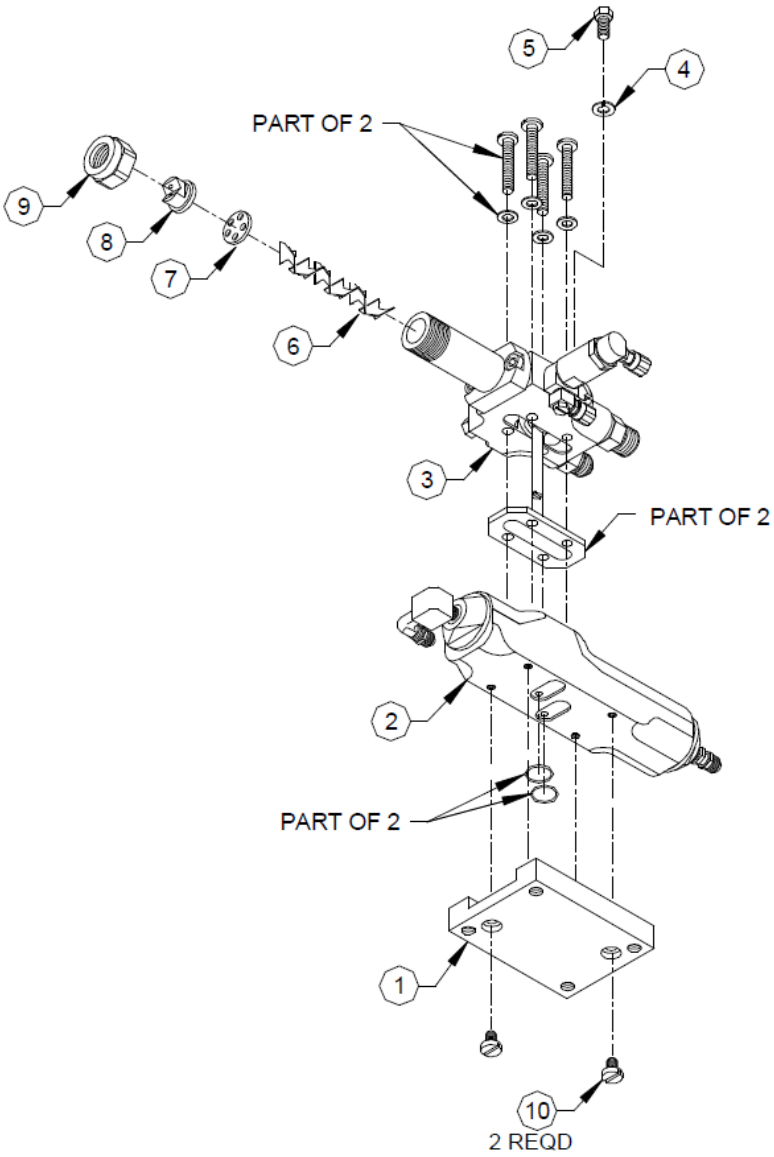
PARTS LIST

ITEM	PART NO.	QTY	DESCRIPTION
1	58704-1	1	MOUNTING PAD - PRO GUN
2	CPC-1200-A	1	ACTUATOR ASSEMBLY
3	VFTC-4100-A	1	GUN BLOCK ASSEMBLY
4	F-SW-04	1	LOCK WASHER
5	F-HB-04C-08	1	HEX BOLT
6	VPG-1003	1	STATIC MIXER
7	VPG-1002	1	DIFFUSER
8	VFIT-6025	1	FIT NOZZLE
9	8704-4-1	1	NOZZLE CAP
10	02806-2	2	PAN HEAD SCREW

OPTIONAL PARTS AND ASSEMBLIES

ITEM	PART NO.	QTY	DESCRIPTION
3A	VFTC-4100-F-A	1	ABRASIVE GUN BLOCK





MAGNUM VENUS PRODUCTS

Auto Pro Gun Assembly	CPC-2000-A-INT

REV. - 03/07/06 BT2

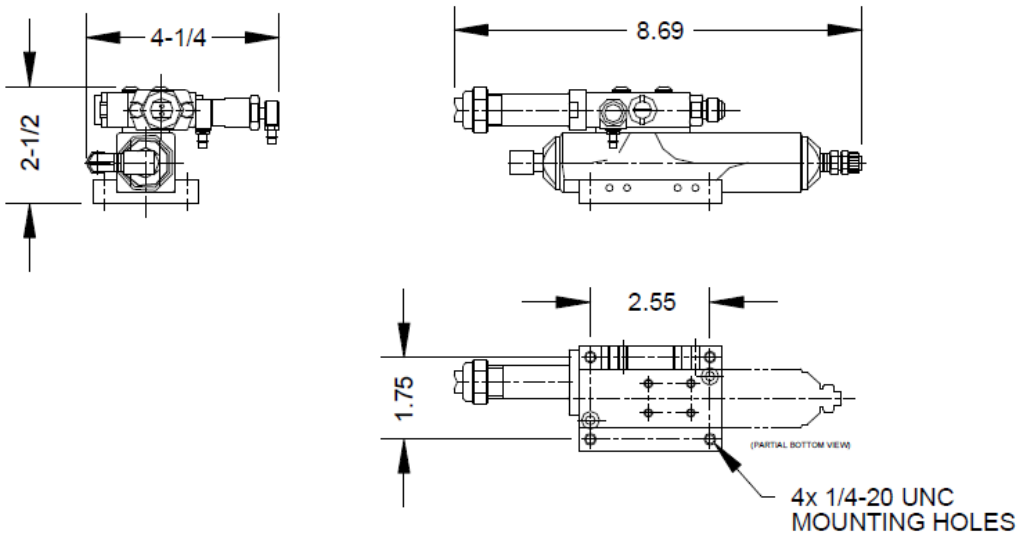
Auto Pro Gun Assembly CPC-2000-A-INT

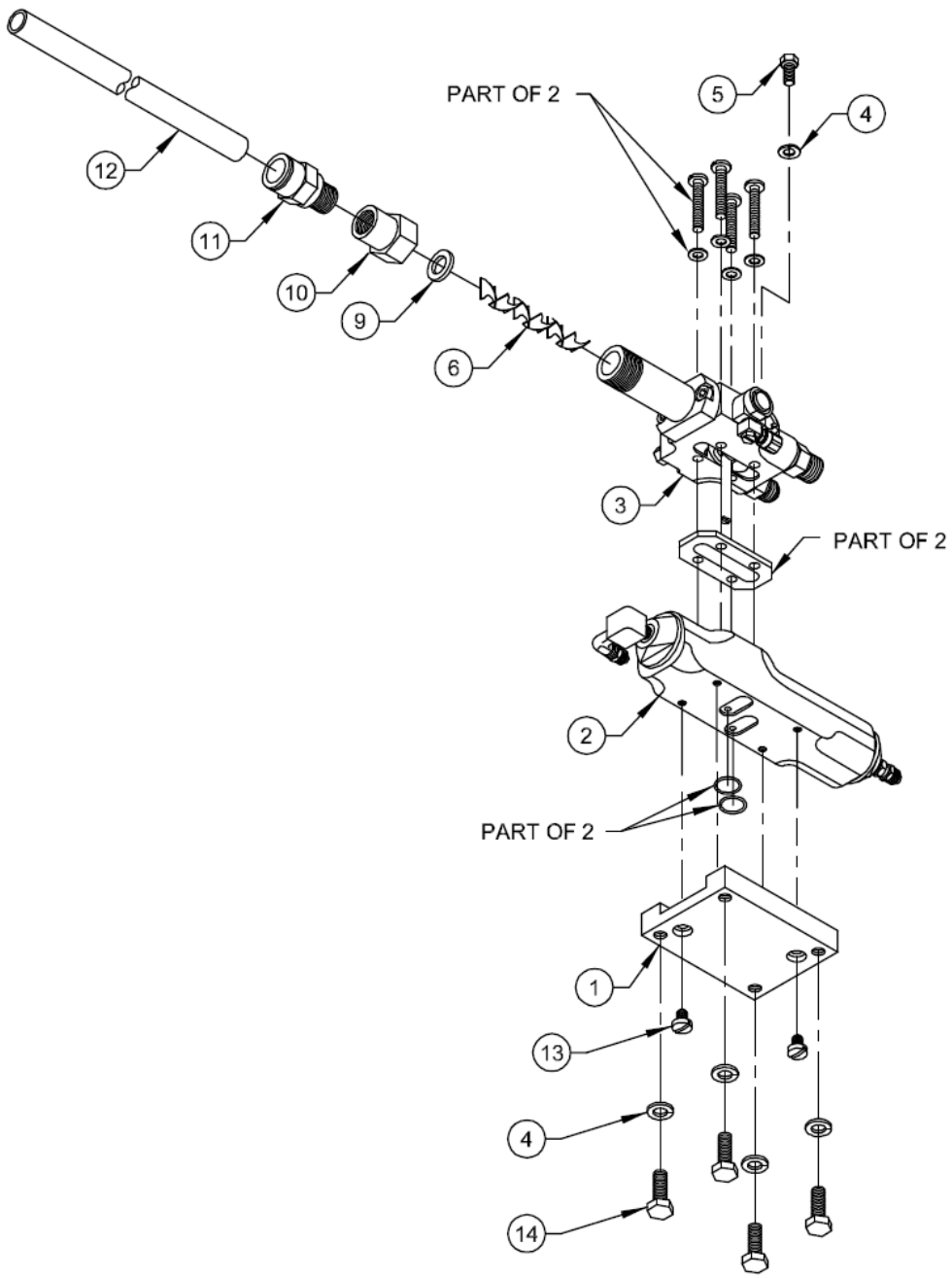
PARTS LIST

ITEM	PART NO.	QTY	DESCRIPTION
1	58704-1	1	MOUNTING PAD - PRO GUN
2	CPC-1200-A	1	ACTUATOR ASSEMBLY
3	VFTC-4100-A-INT	1	GUN BLOCK ASSEMBLY
4	F-SW-04	1	LOCK WASHER
5	F-HB-04C-08	1	HEX BOLT
6	VPG-1003	1	STATIC MIXER
7	VPG-1002	1	DIFFUSER
8	VFIT-6025	1	FIT NOZZLE
9	8704-4-1	1	NOZZLE CAP
10	02806-2	2	PAN HEAD SCREW

OPTIONAL PARTS AND ASSEMBLIES

ITEM	PART NO.	QTY	DESCRIPTION
3A	VFTC-4100-F-A-INT	1	ABRASIVE GUN BLOCK





MAGNUM VENUS PLASTECH

Auto Pro Gun For Tape Machine	CPT-2000-A

REV. - 03/18/08 BT2
REV. A - REMOVED ITEM 7 TRT-1018-3/8 AND ITEM 8 50071-1 03/27/08 BT2

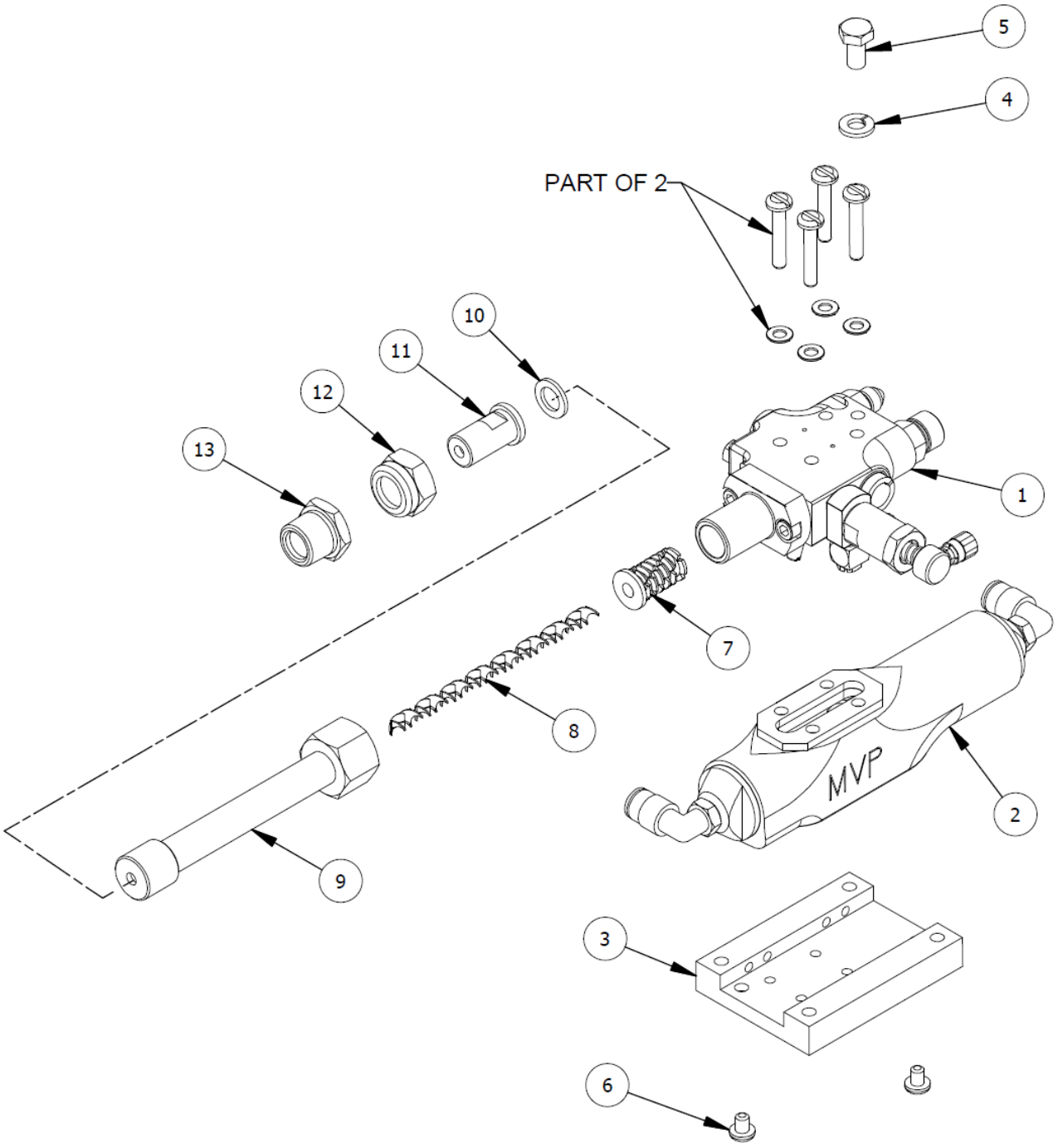
Auto Pro Gun Assembly CPT-2000-A

PARTS LIST

ITEM	PART NO.	QTY	DESCRIPTION
1	58704-1	1	MOUNTING PAD - PRO GUN
2	CPC-1200-A	1	ACTUATOR ASSEMBLY
3	VFTC-4100	1	GUN BLOCK ASSEMBLY
4	F-SW-04	5	LOCK WASHER
5	F-HB-04C-08	1	HEX BOLT
6	VPG-1003	1	STATIC MIXER
9	02030-1	1	SEAL
10	RTM-1004	1	ADAPTER
11	RTM-1005	1	PUSH FITTING
12	01419	3 FT.	TUBING
13	02806-2	2	PAN HEAD SCREW
14	F-HB-04C-12	4	HEX BOLT

REPAIR KIT

PART NO.	DESCRIPTION
CPT-2000-A-RK	MAJOR REPAIR KIT



MAGNUM VENUS PLASTECH

PRO RTM DISPENSE GUN	PRTM-DG-3000-A

REV:B 10/17/12 SHEET 1 / 2 8/12/2009

Parts List			
ITEM	PART NUMBER	QTY	DESCRIPTION
1	5104-00-01-A-INT	1	PRO GUN HEAD ASSEMBLY
2	PRTM-RG-1200-A	1	ACTUATOR ASSEMBLY
3	58704-1	1	MOUNTING PAD
4	F-SW-04	1	LOCK WASHER
5	F-HB-04C-08	1	HEX BOLT
6	02806-2	2	10-24 PAN HEAD SCREW
7	5107-27-3	1	TURBULENT MIXER
8	MIX-1080	1	STATIC MIXER ELEMENT
9	50091-1	1	MIXER HOUSING
10	02149-1	1	NOZZLE SEAL
11	72711-1	1	NOZZLE ADAPTER
12	8704-4-1	1	NOZZLE CAP
13	PF-RB-06-04	1	BUSHING

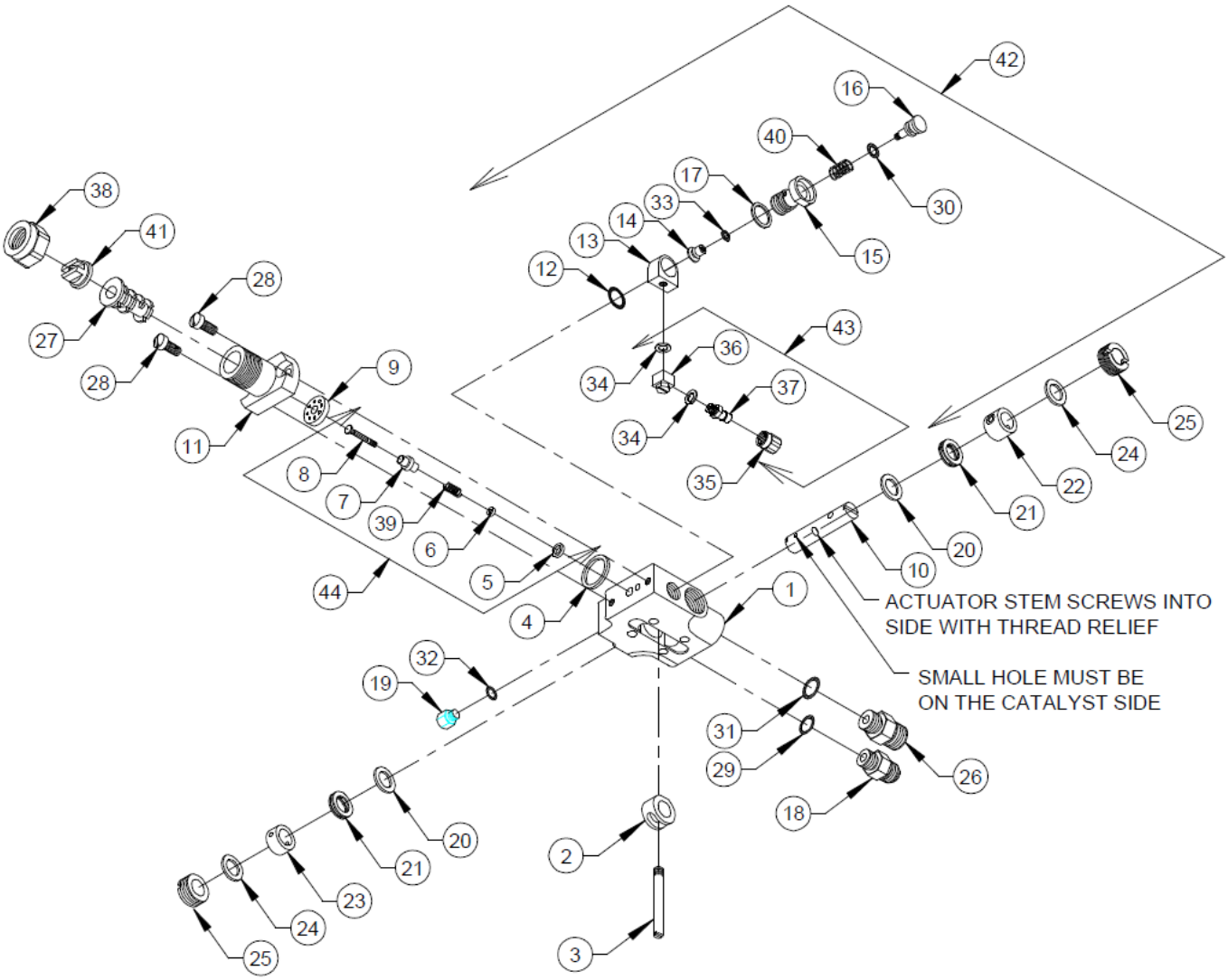
REPAIR KIT

PART No.	DESCRIPTION
PRTM-DG-3000-A-RK	REPAIR KIT

MAGNUM VENUS PLASTECH

PRO RTM DISPENSE GUN	PRTM-DG-3000-A

REV:B 10/17/12 SHEET 2 / 2 8/12/2009



MAGNUM VENUS PRODUCTS

ASSY - PRO GUN BLOCK	58602-1

REV. C = 5104-32-1 REPLACED 07488 CHECK VALVE, UPDATED TO SYS 1 SALES DWG.
REV. D = ITEM 30, 7301-13-008 WAS 7301-11-008, ADDED GO NOT GREASE NOTE
REV. E = ITEM 30 WAS O-S-008A
REV. F = ADDED ITEM 40 9203-2-3

D58602-1 REV. F 09-12-05

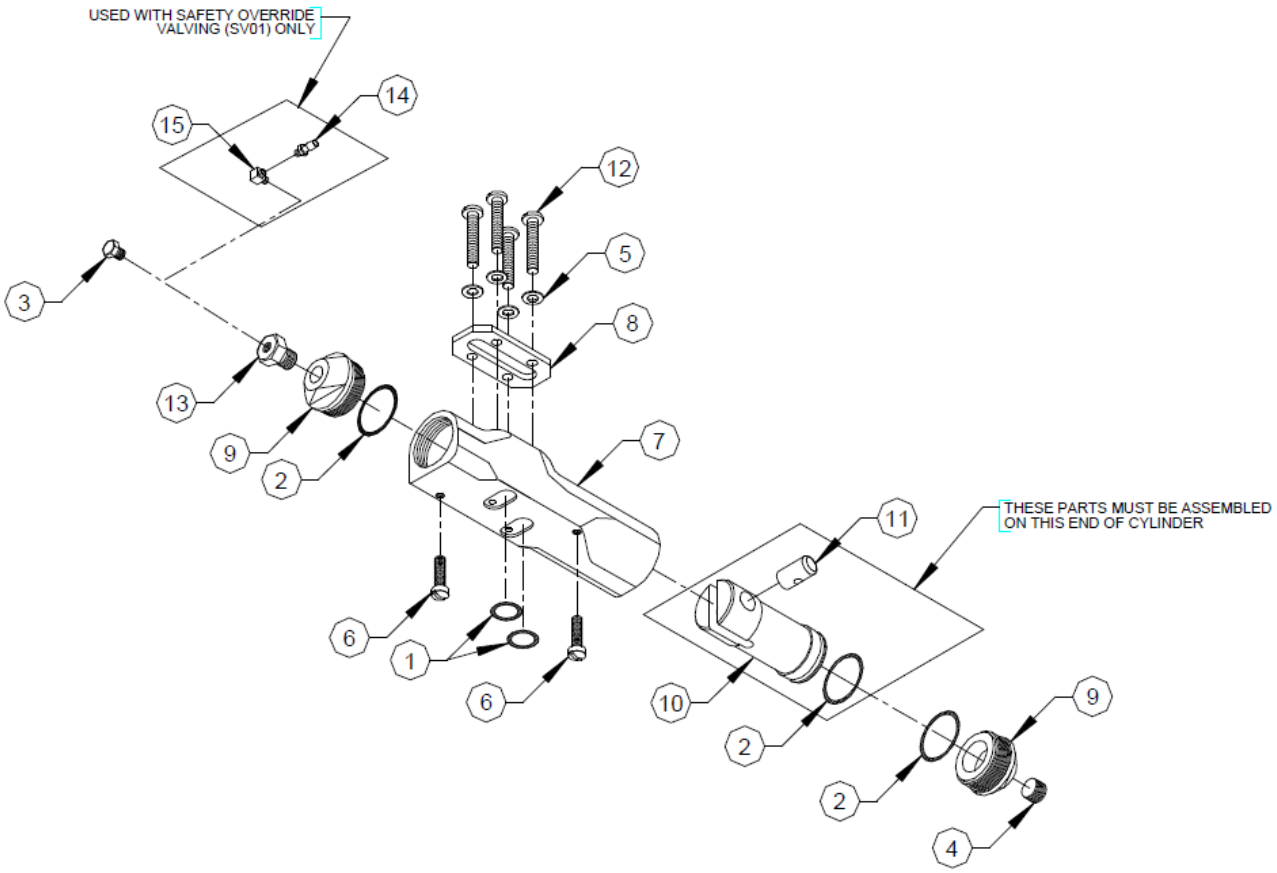
ASSY - PRO GUN BLOCK 58602-1

PARTS LIST

ITEM	PART NO.	QTY	DESCRIPTION
1	5104-1-1	1	GUN BLOCK
2	5104-10-1	1	CENTER SPACER
3	5104-11-1	1	ACTUATING STEM
4	5104-12-1	1	MIX HOUSING SEAL
5	5104-13-1	1	INJECTOR SEAL
6	5104-14-1	1	PLUNGER RETAINER
7	5104-15-1	1	INJECTOR BODY
8	5104-16-1	1	INJECTOR PLUNGER
9	5104-17-1	1	DISTRIBUTION RING
10	5104-2-1	1	VALVE ROD
11	5104-20-1	1	MIX HOUSING
12	5104-21-1	1	FLUSH VALVE SPLIT SEAL
13	5104-22-1	1	FLUSH VALVE NECK
14	5104-23-1	1	FLUSH SEAL BODY
15	5104-24-1	1	FLUSH VALVE BODY
16	5104-25-1	1	FLUSH VALVE BUTTON
17	5104-26-1	1	FLUSH VALVE SEAL
18	7701-3-6	1	CATALYST HOSE FITTING
19	5104-32-1	1	PLUG
20	5104-3-1	2	SECONDARY SEAL
21	5104-4-1	2	SPACER
22	5104-5-1	1	TEFLON RESIN SEAL
23	5104-6-1	1	TEFLON CATALYST SEAL
24	5104-7-1	2	PACKING RING
25	5104-8-1	2	PACKING NUT
26	5104-9-1	2	RESIN FITTING
27	5107-27-2	1	CRITICAL TURBULANT MIXER
28	7102-1-6	2	SOCKET HEAD CAP SCREW
29	7301-10-903	1	O-RING
30	O-E-008	1	O-RING *DO NOT GREASE THIS O-RING*
31	7301-14-904	1	O-RING
32	7301-15-125	1	O-RING
33	O-E-007	1	O-RING
34	7304-3-1	2	NYLON SEAL
35	7701-2-1	1	HOSE CLAMP
36	7701-6-1	1	ELBOW FITTING
37	7701-6-3	1	BARBED FITTING
38	8704-4-1	1	NOZZLE CAP
39	9203-2-2	1	COMPRESSION SPRING
40	9203-2-3	1	COMPRESSION SPRING
41	T-002552C	1	SPRAY NOZZLE

OPTIONAL PARTS AND ASSEMBLIES

ITEM	PART NO.	QTY	DESCRIPTION
9B	5104-18-1	1	FILLED RESIN DISRIBUTION RING
9C	5104-19-1	1	CRITICAL MIX DISTRIBUTION RING
30B	7301-11-008	1	O-RING
42	5104-01-01	1	FLUSH VALVE ASSEMBLY
43	5104-02-01	1	FLUSH ELBOW
44	5104-03-01	1	INJECTOR ASSEMBLY



MAGNUM VENUS PLASTECH

Pro Series Gun Actuator Assembly	58604-1
Pro Series Gun Actuator Assembly with Signal	58604-1-S

REV. A = ADDED 58604-1-S ACTUATOR TO DRAWING 09/14/05
REV. B = UPDATED ITEMS 1,2, AND 3 TO ALPHA-NUMERIC, ITEM 14 WAS 7701-6-7 03/28/08 BT2

Pro Series Gun Actuator Assembly 58604-1

COMMON PARTS LIST

ITEM	PART NO.	QTY	DESCRIPTION
1	O-V-013	2	O-RING
2	O-V-020	3	O-RING
4	PF-AP-02	1	1/8" PIPE PLUG
5	5106-3-1	4	MOUNTING SEAL
6	58626-1	2	MOUNTING SCREW
7	58631-1	1	CYLINDER BODY ASSY
8	5106-2-1	1	ACTUATOR SEAL
9	5106-4-1	2	CYLINDER CAP
10	5106-7-1	1	ACTUATING PISTON
11	5106-5-1	1	BUSHING
12	5106-6-1	4	MOUNTING SCREW
13	5102-2-1	1	SCREW - TRIGGER

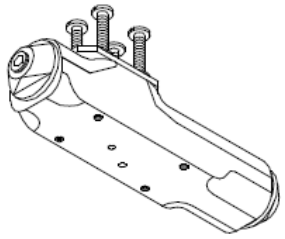
Actuator Assembly 58604-1

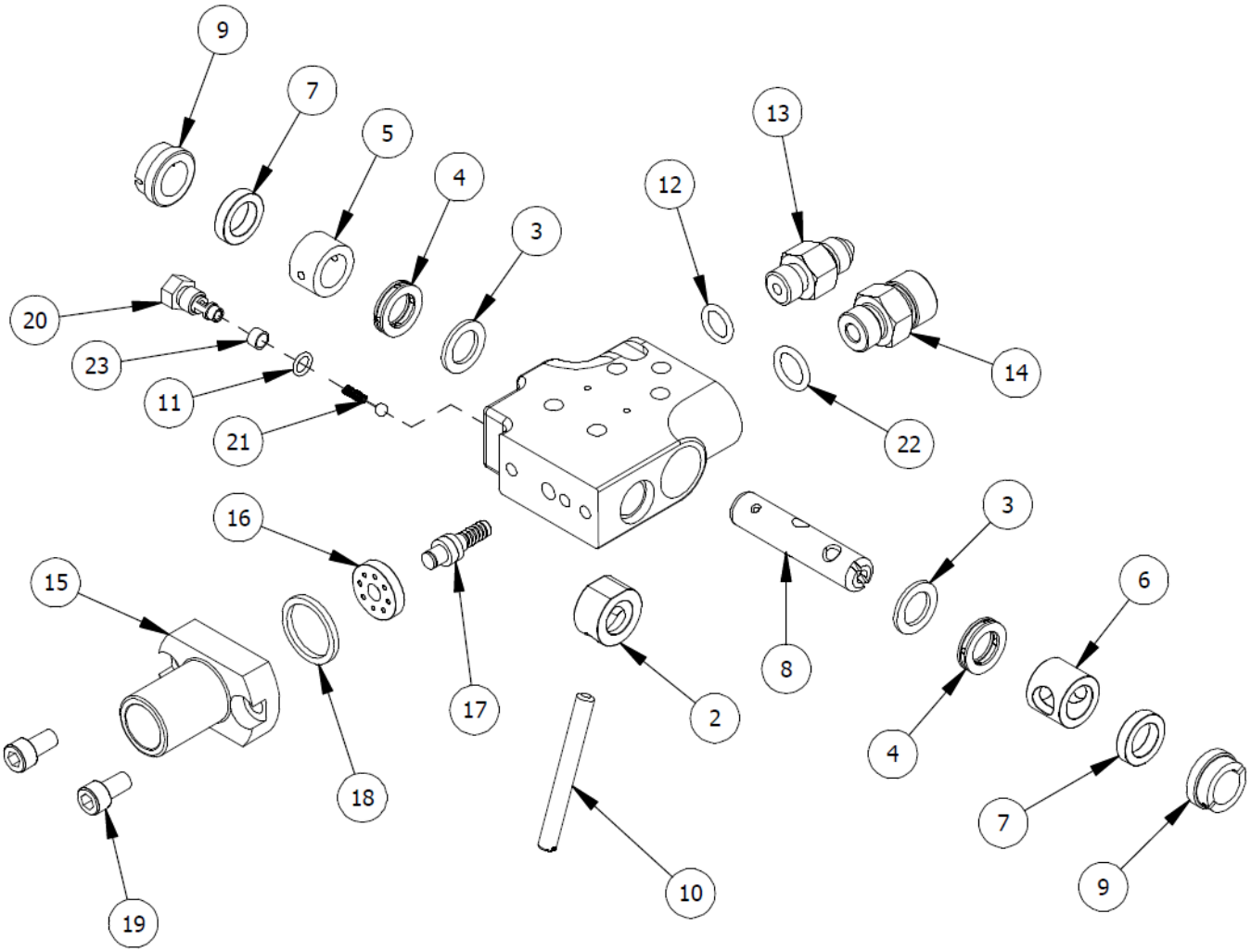
ITEM	PART NO.	QTY	DESCRIPTION
3	7701-4-6	1	HEX HEAD PLUG

Actuator Assembly w/ Signal 58604-1-S

ITEM	PART NO.	QTY	DESCRIPTION
14	7701-6-3	1	BARBED FITTING
15	7701-6-1	1	ELBOW

FIGURE 1-1





MAGNUM VENUS PLASTECH

INNOVATOR GUN HEAD	CPC-1100-INV

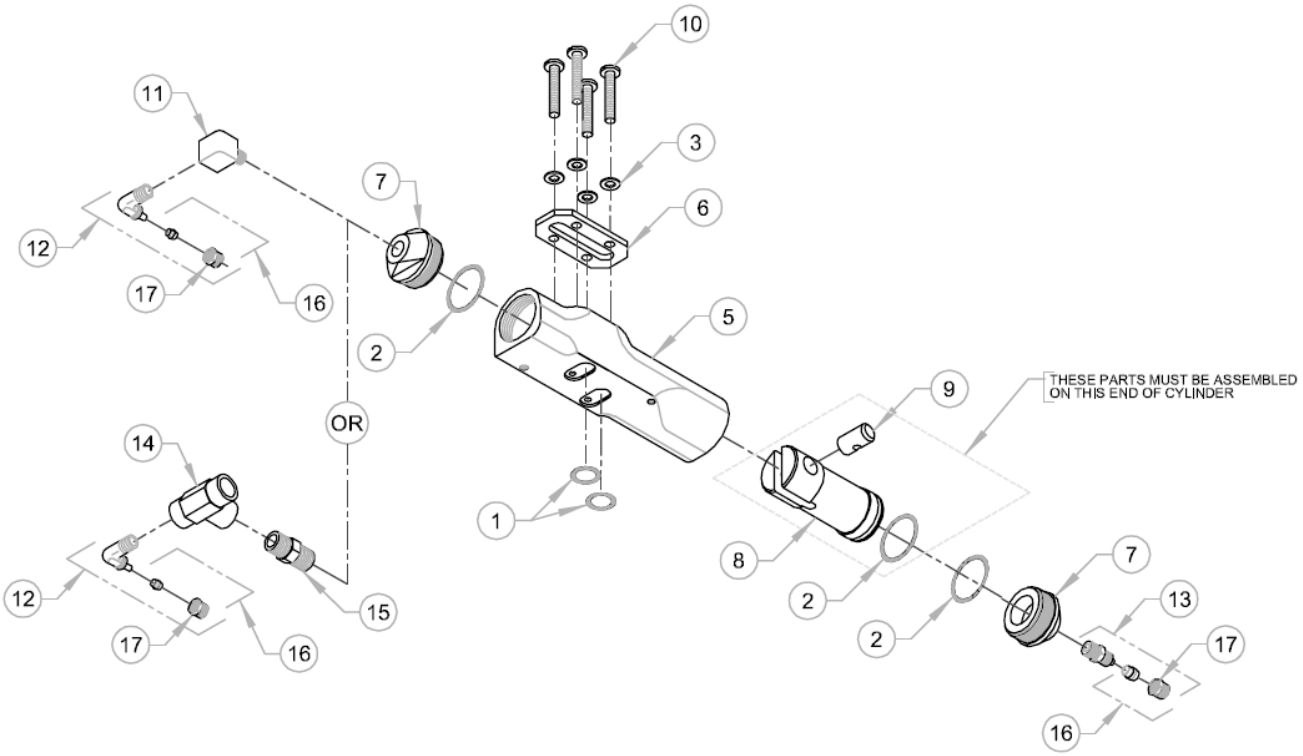
REV: SHEET 1 / 2 1/12/2010

Parts List			
ITEM	PART NUMBER	QTY	DESCRIPTION
1	5104-1-1	1	PRO GUN BLOCK
2	5104-10-1	1	CENTER SPACER
3	5104-3-1	2	SECONDARY SEAL
4	5104-4-1	2	RELIEF SPACER
5	5104-6-1	1	TEFLON CATALYST SEAL
6	5104-5-1	1	RESIN SEAL
7	5104-7-1	2	PACKING RING
8	5104-2-1	1	VALVE ROD
9	5104-8-1B	2	PACKING NUT
10	5104-11-1	1	ACTUATING STEM
11	O-S-5-125	1	O-RING
12	O-S-3-903	1	SILICONE O-RING
13	7701-3-6	1	CONNECTOR FITTING
14	5104-9-1	1	RESIN FITTING
15	5104-20-1	1	MIX HOUSING
16	5104-17-1	1	DISTRIBUTION RING
17	5104-03-01	1	INJECTOR ASSY
18	5104-12-1	1	MIX HOUSING SEAL
19	F-CS-1024-06	2	CAP SCREW
20	7702-1-4	1	CHECK VALVE BODY
21	7702-1-6	1	BALL AND SPRING
22	O-E-3-904	1	O-RING
23	7702-1-5	1	CHECK VALVE SLEEVE

MAGNUM VENUS PLASTECH

INNOVATOR GUN HEAD	CPC-1100-INV

REV: SHEET 2 / 2 1/12/2010



MAGNUM VENUS PLASTECH

Pro Series Automatic Gun Actuator	CPC-1200-A
Pro Series Automatic Gun Actuator	CPC-1200-A-2

REV. – 03/14/06 BT2
REV. A - REMOVED ITEM 4 58626-1 11/01/06 BT2
REV. B - ITEM 16 WAS 00437 FERRULE 05/10/12 BT2

Pro Series Gun Actuator CPC-1200-A
Pro Series Gun Actuator CPC-1200-A-2

COMMON PARTS LIST

ITEM	PART NO.	QTY	DESCRIPTION
1	O-V-013	2	O-RING
2	O-V-020	3	O-RING
3	5106-3-1	4	MOUNTING SEAL
5	58631-1	1	CYLINDER BODY ASSY
6	5106-2-1	1	ACTUATOR SEAL
7	5106-4-1	2	CYLINDER CAP
8	5106-7-1	1	ACTUATING PISTON
9	5106-5-1	1	BUSHING
10	5106-6-1	4	MOUNTING SCREW
12	MPH-2534	1	MALE ELBOW POLY FITTING
13	7701-6-14	1	STRAIGHT POLY FITTING

Pro Series Gun Actuator CPC-1200-A

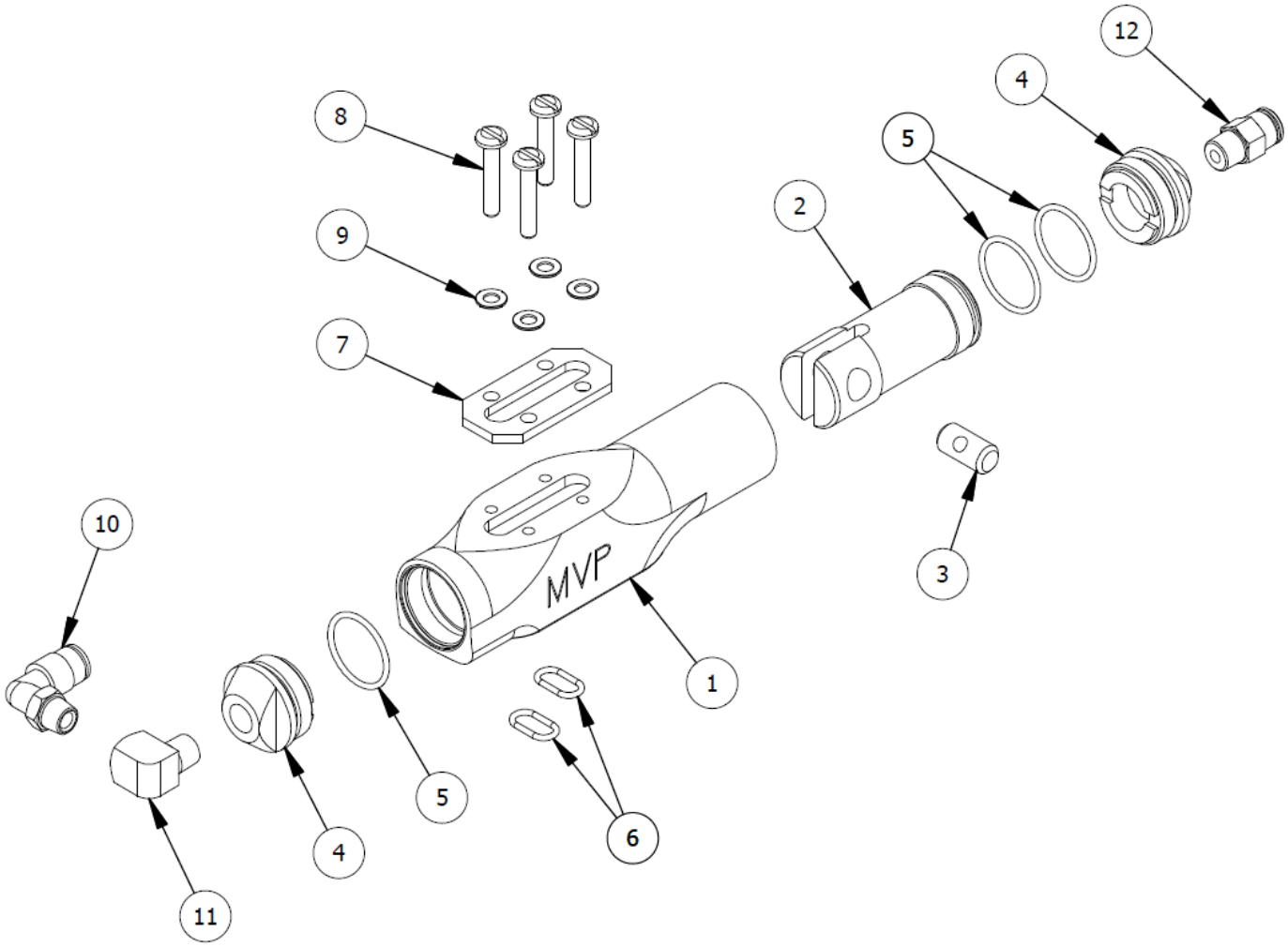
ITEM	PART NO.	QTY	DESCRIPTION
11	PF-SE-02-BR	1	STREET ELBOW

Pro Series Gun Actuator - Gel CPC-1200-A-2

ITEM	PART NO.	QTY	DESCRIPTION
14	PF-FT-02	1	FEMALE TEE
15	PF-HN-02	1	HEX NIPPLE

OPTIONAL PARTS

ITEM	PART NO.	QTY	DESCRIPTION
16	7701-6-11	3	FERRULE W/ NUT
17	7701-6-12	3	POLY NUT ONLY



MAGNUM VENUS PLASTECH

ACTUATOR ASSEMBLY	PRTM-DG-1200-A

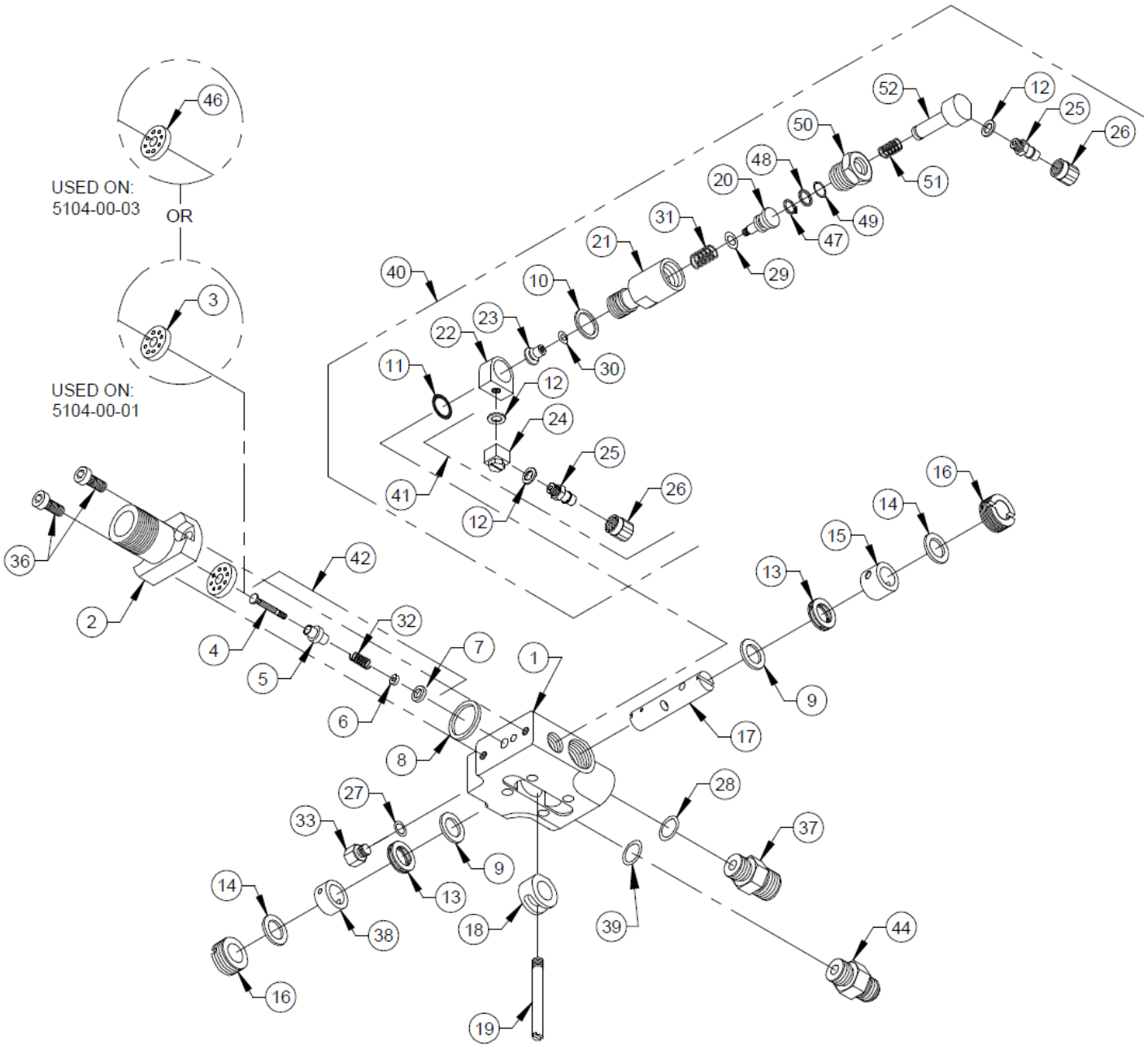
REV: SHEET 1 / 2 8/11/2009

Parts List			
ITEM	PART NUMBER	QTY	DESCRIPTION
1	58631-1	1	CYLINDER BODY ASSY. - CLASSIC PRO
2	5106-7-1	1	ACTUATING PISTON
3	5106-5-1	1	ACTUATOR BUSHING
4	5106-4-1	2	CYLINDER CAP
5	O-V-020	3	O-RING
6	O-V-013	2	O-RING
7	5106-2-1	1	ACTUATOR SEAL
8	5106-6-1	4	MOUNTING SCREW
9	5106-3-1	4	MOUNTING SEAL
10	MPH-2539	1	MALE ELBOW
11	PF-SE-02-BR	1	STREET ELBOW
12	07223	1	MALE CONNECTOR

MAGNUM VENUS PLASTECH

ACTUATOR ASSEMBLY	PRTM-DG-1200-A

REV: SHEET 2 / 2 8/11/2009



MAGNUM VENUS PRODUCTS

Automatic Gun Block Assy	5104-00-01-A
Automatic Abrasive Gun Block Assy	5104-00-03-A

REV - 03-03-06 BT2

Common Assembly Parts For:

Gun Block Assy 5104-00-01-A
Abrasive Gun Block Assy 5104-00-03-A

PARTS LIST

ITEM	PART NO.	QTY	DESCRIPTION
1	5104-1-1	1	GUN BLOCK
2	5104-20-1	1	MIX HOUSING
4	5104-16-1	1	INJECTOR PLUNGER
5	5104-15-1	1	INJECTOR BODY
6	5104-14-1	1	PLUNGER RETAINER
7	5104-13-1	1	INJECTOR SEAL
8	5104-12-1	1	MIX HOUSING SEAL
9	5104-3-1	2	SECONDARY SEAL
10	5104-26-1	1	FLUSH VALVE SEAL
11	5104-21-1	1	FLUSH VALVE SPLIT SEAL
12	7304-3-1	3	NYLON SEAL
13	5104-4-1	2	RELIEF SPACER
14	5104-7-1	2	PACKING RING
15	5104-5-1	1	RESIN SEAL
16	5104-8-1	2	PACKING NUT
17	5104-2-1	1	VALVE ROD
18	5104-10-1	1	CENTER SPACER
19	5104-11-1	1	ACTUATING STEM
20	5104-25-1	1	FLUSH VALVE BUTTON
21	58681-1	1	FLUSH VALVE BODY
22	5104-22-1	1	FLUSH VALVE NECK
23	5104-23-1	1	FLUSH SEAL BODY
24	TRU-1021	1	ELBOW FITTING
25	7701-6-3	2	BARB FITTING
26	7701-2-1	2	HOSE CLAMP
27	O-S-5-125	1	O-RING
28	O-E-3-904	1	O-RING
29	O-E-008	1	O-RING *DO NOT GREASE THIS O-RING*
30	O-E-007	1	O-RING
31	9203-2-3	1	COMPRESSION SPRING
32	9203-2-2	1	COMPRESSION SPRING
33	5104-32-1	1	PLUG
36	F-CS-1024-06	2	SOCKET HEAD CAP SCREW
37	5104-9-1	1	RESIN FITTING
38	5104-6-1	1	TEFLON CATALYST SEAL
39	O-S-3-903	1	O-RING
44	7701-3-6	1	CONNECTOR FITTING
47	00973	1	GRIP RING
48	58718-1	1	BACK UP RING
49	O-B-010	1	O-RING
50	58717-1	1	MANUAL / AUTO FLUSH BODY
51	04356	1	SPRING
52	58716-1	1	PUSH STEM

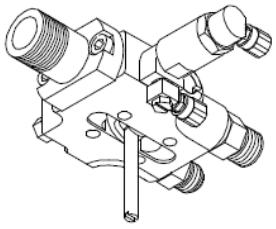
OPTIONAL PARTS AND ASSEMBLIES

ITEM	PART NO.	QTY	DESCRIPTION
3B	5104-19-1	1	CRITICAL MIX DIST RING
29B	O-K-008	1	O-RING
40	58742-1	1	FLUSH VALVE ASSEMBLY
41	5104-02-01	1	FLUSH ELBOW ASSEMBLY
42	5104-03-01	1	INJECTOR ASSEMBLY
15B	5104-29-01	1	FILLED RESIN SEAL ASSY

REPAIR KIT

PART NO.	DESCRIPTION
6702-016-01-A	GUN BLOCK REPAIR KIT

FIGURE 1-1

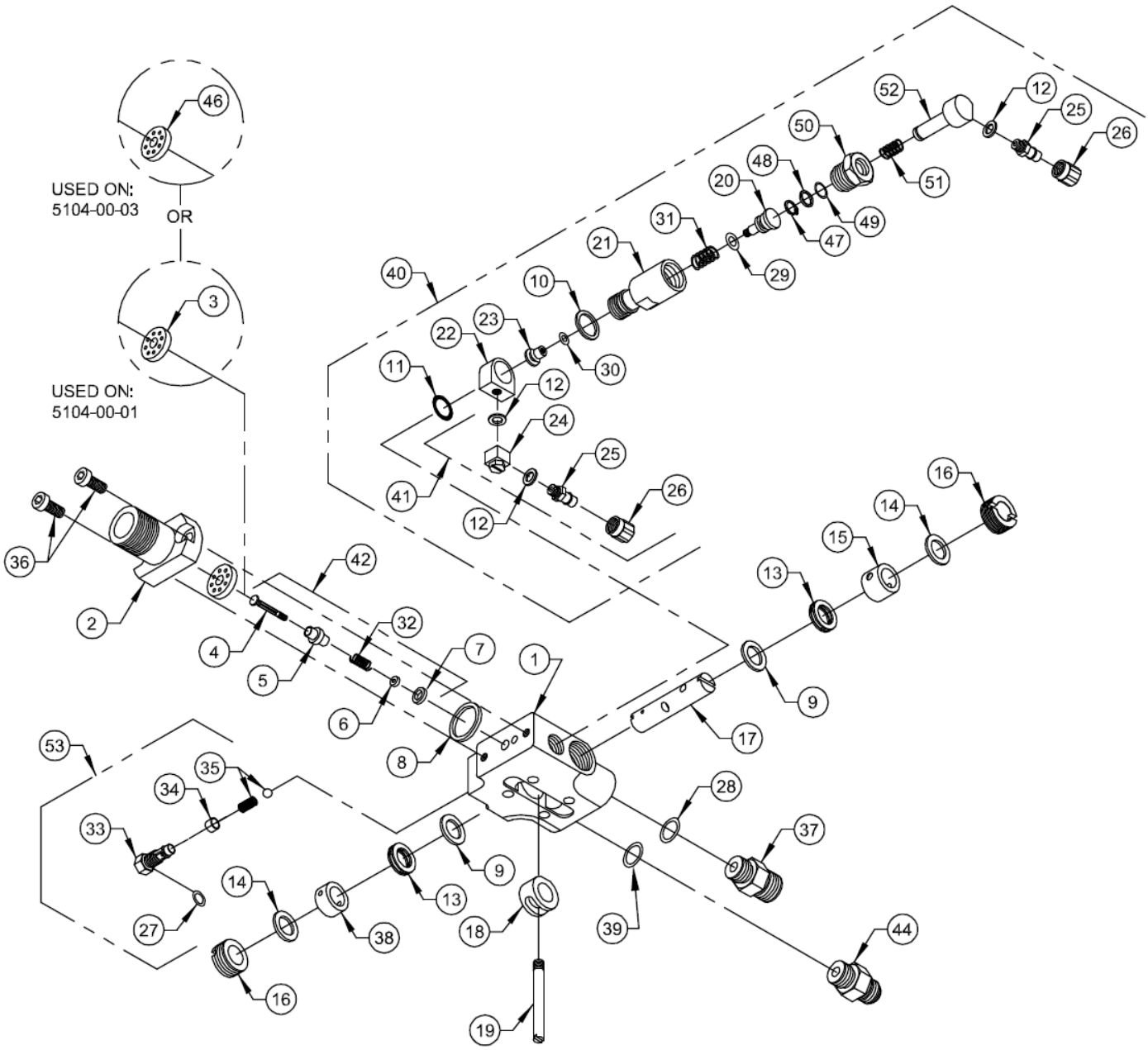


Gun Block Assy 5104-00-01-A

ITEM	PART NO.	QTY	DESCRIPTION
3	5104-17-1	1	DISTRIBUTION RING

AbrasiveGun Block Assy 5104-00-03-A

ITEM	PART NO.	QTY	DESCRIPTION
46	5104-18-1	1	FILLED RESIN DIST RING



MAGNUM VENUS PLASTECH

Automatic Gun Block Assy	5104-00-01-A-INT
Automatic Abrasive Gun Block Assy	5104-00-03-A-INT

REV - 03-03-06 BT2
REV A - ITEM 53 WAS RENUMBERED 08-07-08 BT2
REV B - ITEM 40 WAS 58742-1 07-19-10 BT2

Common Assembly Parts For:

Gun Block 5104-00-01-A-INT
Abrasive Gun Block 5104-00-03-A-INT

PARTS LIST

ITEM	PART NO.	QTY	DESCRIPTION
1	5104-1-1	1	GUN BLOCK
2	5104-20-1	1	MIX HOUSING
4	5104-16-1	1	INJECTOR PLUNGER
5	5104-15-1	1	INJECTOR BODY
6	5104-14-1	1	PLUNGER RETAINER
7	5104-13-1	1	INJECTOR SEAL
8	5104-12-1	1	MIX HOUSING SEAL
9	5104-3-1	2	SECONDARY SEAL
10	5104-26-1	1	FLUSH VALVE SEAL
11	5104-21-1	1	FLUSH VALVE SPLIT SEAL
12	7304-3-1	3	NYLON SEAL
13	5104-4-1	2	RELIEF SPACER
14	5104-7-1	2	PACKING RING
15	5104-5-1	1	RESIN SEAL
16	5104-8-1	2	PACKING NUT
17	5104-2-1	1	VALVE ROD
18	5104-10-1	1	CENTER SPACER
19	5104-11-1	1	ACTUATING STEM
20	5104-25-1	1	FLUSH VALVE BUTTON
21	58681-1	1	FLUSH VALVE BODY
22	5104-22-1	1	FLUSH VALVE NECK
23	5104-23-1	1	FLUSH SEAL BODY
24	TRU-1021	1	ELBOW FITTING
25	7701-6-3	2	BARB FITTING
26	7701-2-1	2	HOSE CLAMP
27	O-S-5-125	1	O-RING
28	O-E-3-904	1	O-RING
29	O-E-008	1	O-RING *DO NOT GREASE THIS O-RING*
30	O-A-007	1	O-RING
31	9203-2-3	1	COMPRESSION SPRING
32	9203-2-2	1	COMPRESSION SPRING
33	7702-1-4	1	CHECK VALVE BODY
34	7702-1-5	1	CHECK VALVE SLEEVE
35	7702-1-6	1	BALL & SPRING ASSEMBLY
36	F-CS-1024-06	2	SOCKET HEAD CAP SCREW
37	5104-9-1	1	RESIN FITTING
38	5104-6-1	1	TEFLON CATALYST SEAL
39	O-S-3-903	1	O-RING
44	7701-3-6	1	CONNECTOR FITTING
47	00973	1	GRIP RING
48	58718-1	1	BACK UP RING
49	O-B-010	1	O-RING
50	58717-1	1	MANUAL / AUTO FLUSH BODY
51	04356	1	SPRING
52	58716-1	1	PUSH STEM

Gun Block Assy 5104-00-01-A

ITEM	PART NO.	QTY	DESCRIPTION
3	5104-17-1	1	DISTRIBUTION RING

AbrasiveGun Block Assy 5104-00-03-A

ITEM	PART NO.	QTY	DESCRIPTION
46	5104-18-1	1	FILLED RESIN DIST RING

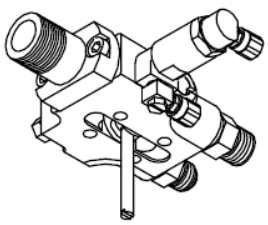
OPTIONAL PARTS AND ASSEMBLIES

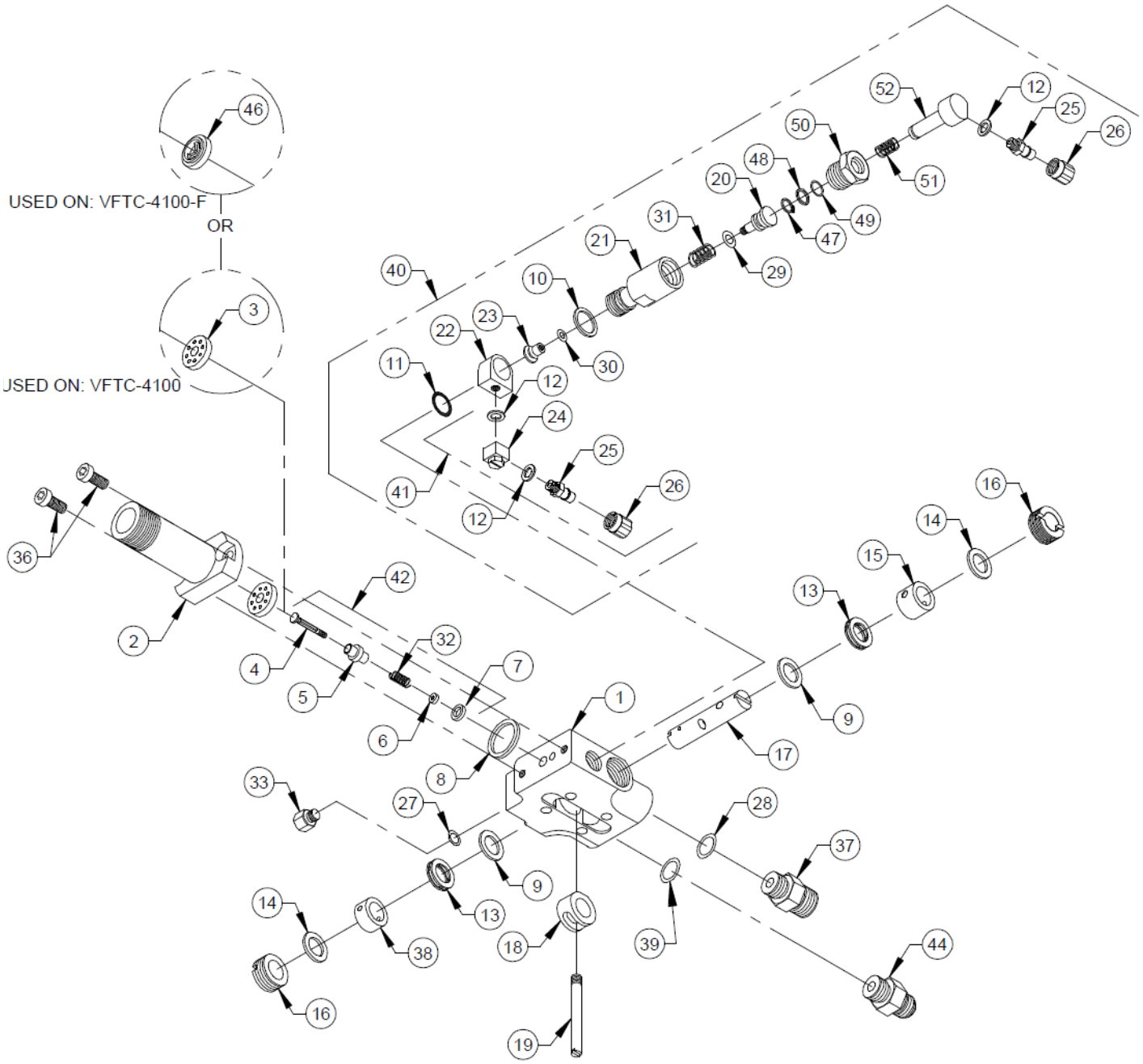
ITEM	PART NO.	QTY	DESCRIPTION
3B	5104-19-1	1	CRITICAL MIX DIST RING
15B	5104-29-01	1	FILLED RESIN SEAL ASSEMBLY
29B	O-K-008	1	O-RING
40	58742-1-INT	1	FLUSH VALVE ASSEMBLY
41	5104-02-01	1	FLUSH ELBOW ASSEMBLY
42	5104-03-01	1	INJECTOR ASSEMBLY
53	5104-04-01	1	CHECK VALVE ASSEMBLY

REPAIR KIT

PART NO.	DESCRIPTION
6702-016-01-A	GUN BLOCK REPAIR KIT

FIGURE 1-1





MAGNUM VENUS PRODUCTS

Automatic FIT Gun Head Assy	VFTC-4100-A
Automatic FIT Filled Gun Head Assy	VFTC-4100-F-A

REV - 03-07-06 BT2

Common Assembly Parts For:

Automatic FIT Gun Head VFTC-4100-A
Automatic FIT Filled Gun Head VFTC-4100-F-A

PARTS LIST

ITEM	PART NO.	QTY	DESCRIPTION
1	5104-1-1	1	GUN BLOCK
2	VPG-1001	1	MIX HOUSING
4	5104-16-1	1	INJECTOR PLUNGER
5	5104-15-1	1	INJECTOR BODY
6	5104-14-1	1	PLUNGER RETAINER
7	5104-13-1	1	INJECTOR SEAL
8	5104-12-1	1	MIX HOUSING SEAL
9	5104-3-1	2	SECONDARY SEAL
10	5104-26-1	1	FLUSH VALVE SEAL
11	5104-21-1	1	FLUSH VALVE SPLIT SEAL
12	7304-3-1	3	NYLON SEAL
13	5104-4-1	2	RELIEF SPACER
14	5104-7-1	2	PACKING RING
15	5104-5-1	1	RESIN SEAL
16	5104-8-1	2	PACKING NUT
17	5104-2-1	1	VALVE ROD
18	5104-10-1	1	CENTER SPACER
19	5104-11-1	1	ACTUATING STEM
20	5104-25-1	1	FLUSH VALVE BUTTON
21	58681-1	1	FLUSH VALVE BODY
22	5104-22-1	1	FLUSH VALVE NECK
23	5104-23-1	1	FLUSH SEAL BODY
24	7701-6-1	1	ELBOW FITTING
25	7701-6-3	2	BARB FITTING
26	7701-2-1	2	HOSE CLAMP
27	O-S-5-125	1	O-RING
28	O-E-3-904	1	O-RING
29	O-E-008	1	O-RING *DO NOT GREASE THIS O-RING*
30	O-E-007	1	O-RING
31	9203-2-3	1	COMPRESSION SPRING
32	9203-2-2	1	COMPRESSION SPRING
33	5104-32-1	1	GUN HEAD PLUG
36	F-CS-1024-06	2	SOCKET HEAD CAP SCREW
37	VPG-1066	1	RESIN FITTING
38	5104-6-1	1	TEFLON CATALYST SEAL
39	O-S-3-903	1	O-RING
44	7701-3-6	1	CONNECTOR FITTING
47	00973	1	GRIP RING
48	58718-1	1	BACKUP RING
49	O-B-010	1	O-RING
50	58717-1	1	MANUAL / AUTO FLUSH BODY
51	04356	1	SPRING
52	58716-1	1	PUSH STEM

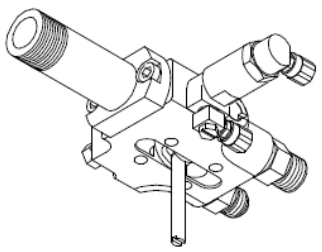
OPTIONAL PARTS AND ASSEMBLIES

ITEM	PART NO.	QTY	DESCRIPTION
3B	5104-19-1	1	CRITICAL MIX DIST RING
29B	0-K-008	1	O-RING
40	58742-1	1	AUTO FLUSH VALVE ASSY.
41	5104-02-01	1	FLUSH ELBOW ASSEMBLY
42	5104-03-01	1	INJECTOR ASSEMBLY
15B	5104-29-01	1	FILLED RESIN SEAL ASSY

REPAIR KIT

PART NO.	DESCRIPTION
6702-016-01-A	GUN BLOCK REPAIR KIT

FIGURE 1-1

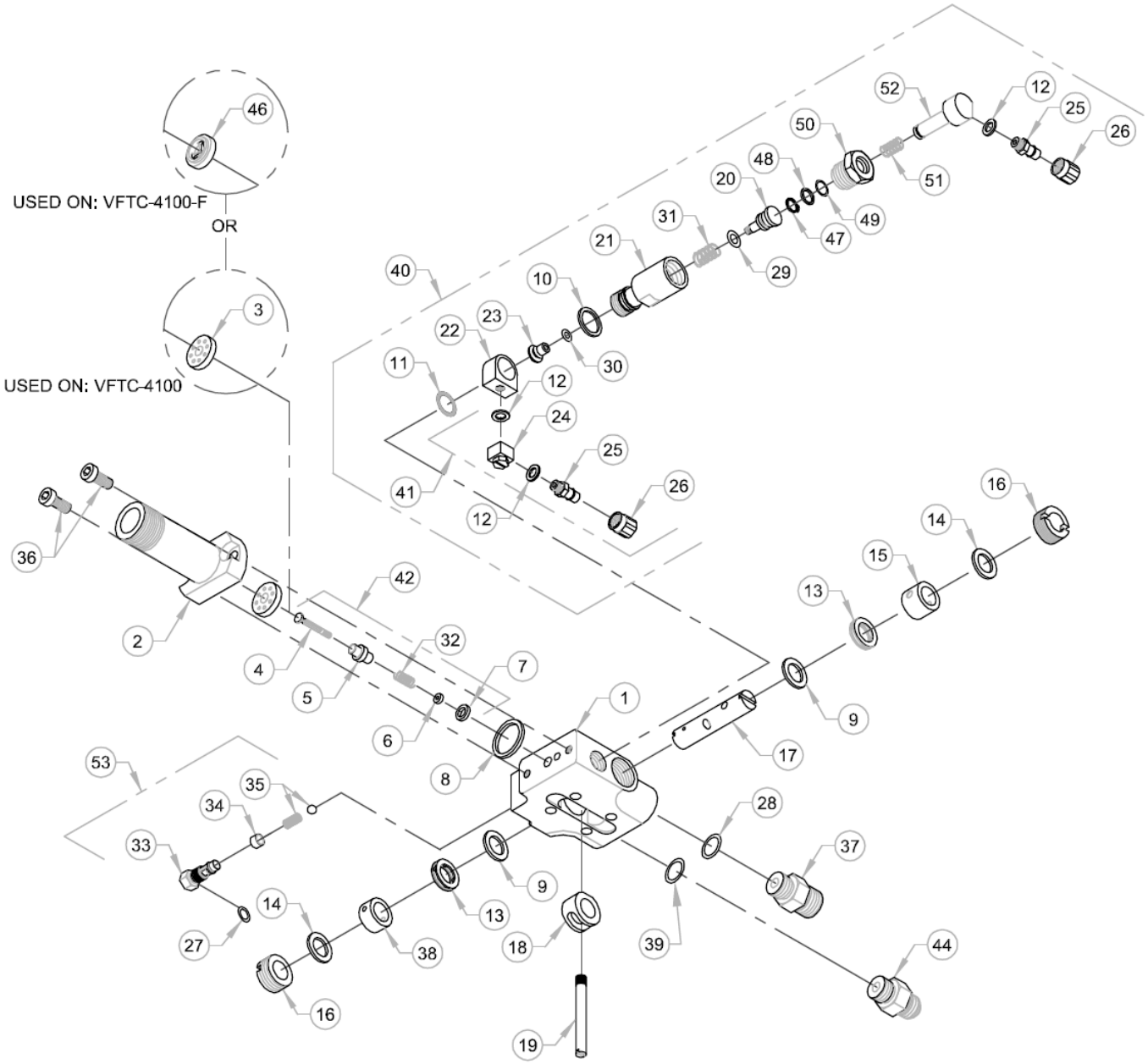


Automatic FIT Gun Head Assy VFTC-4100-A

ITEM	PART NO.	QTY	DESCRIPTION
3	5104-17-1	1	DISTRIBUTION RING

Automatic FIT Filled Gun Head Assy VFTC-4100-F-A

ITEM	PART NO.	QTY	DESCRIPTION
46	5104-18-1	1	FILLED RESIN DIST RING



MAGNUM VENUS PLASTECH

Automatic FIT Gun Head Assy	VFTC-4100-A-INT
Automatic FIT Filled Gun Head Assy	VFTC-4100-F-A-INT

REV - 03-07-06 BT2
REV A - ITEM 53 WAS INCORRECTLY LABELED AS ITEM 48 06-08-10 BT2
REV B - ITEM 40 WAS 58742-1 07-19-10 BT2

Common Assembly Parts For:

Automatic FIT Gun Head VFTC-4100-A-INT
Automatic FIT Filled Gun Head VFTC-4100-F-A-INT

PARTS LIST

ITEM	PART NO.	QTY	DESCRIPTION
1	5104-1-1	1	GUN BLOCK
2	VPG-1001	1	MIX HOUSING
4	5104-16-1	1	INJECTOR PLUNGER
5	5104-15-1	1	INJECTOR BODY
6	5104-14-1	1	PLUNGER RETAINER
7	5104-13-1	1	INJECTOR SEAL
8	5104-12-1	1	MIX HOUSING SEAL
9	5104-3-1	2	SECONDARY SEAL
10	5104-26-1	1	FLUSH VALVE SEAL
11	5104-21-1	1	FLUSH VALVE SPLIT SEAL
12	7304-3-1	3	NYLON SEAL
13	5104-4-1	2	RELIEF SPACER
14	5104-7-1	2	PACKING RING
15	5104-5-1	1	RESIN SEAL
16	5104-8-1	2	PACKING NUT
17	5104-2-1	1	VALVE ROD
18	5104-10-1	1	CENTER SPACER
19	5104-11-1	1	ACTUATING STEM
20	5104-25-1	1	FLUSH VALVE BUTTON
21	58681-1	1	FLUSH VALVE BODY
22	5104-22-1	1	FLUSH VALVE NECK
23	5104-23-1	1	FLUSH SEAL BODY
24	7701-6-1	1	ELBOW FITTING
25	7701-6-3	2	BARB FITTING
26	7701-2-1	2	HOSE CLAMP
27	O-S-5-125	1	O-RING
28	O-E-3-904	1	O-RING
29	O-E-008	1	O-RING *DO NOT GREASE THIS O-RING*
30	O-A-007	1	O-RING
31	9203-2-3	1	COMPRESSION SPRING
32	9203-2-2	1	COMPRESSION SPRING
33	7702-1-4	1	CHECK VALVE BODY
34	7702-1-5	1	CHECK VALVE SLEEVE
35	7702-1-6	1	BALL & SPRING ASSEMBLY
36	F-CS-1024-06	2	SOCKET HEAD CAP SCREW
37	VPG-1066	1	RESIN FITTING
38	5104-6-1	1	TEFLON CATALYST SEAL
39	O-S-3-903	1	O-RING
44	7701-3-6	1	CONNECTOR FITTING
47	00973	1	GRIP RING
48	58718-1	1	BACKUP RING
49	O-B-010	1	O-RING
50	58717-1	1	MANUAL / AUTO FLUSH BODY
51	04356	1	SPRING
52	58716-1	1	PUSH STEM

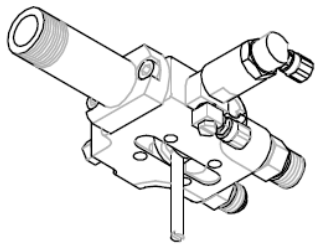
OPTIONAL PARTS AND ASSEMBLIES

ITEM	PART NO.	QTY	DESCRIPTION
3B	5104-19-1	1	CRITICAL MIX DIST RING
15B	5104-29-01	1	FILLED RESIN SEAL ASSEMBLY
29B	O-K-008	1	O-RING
40	58742-1-INT	1	FLUSH VALVE ASSEMBLY
41	5104-02-01	1	FLUSH ELBOW ASSEMBLY
42	5104-03-01	1	INJECTOR ASSEMBLY
53	5104-04-01	1	CHECK VALVE ASSEMBLY

REPAIR KIT

PART NO.	DESCRIPTION
6702-016-01-A	GUN BLOCK REPAIR KIT

FIGURE 1-1

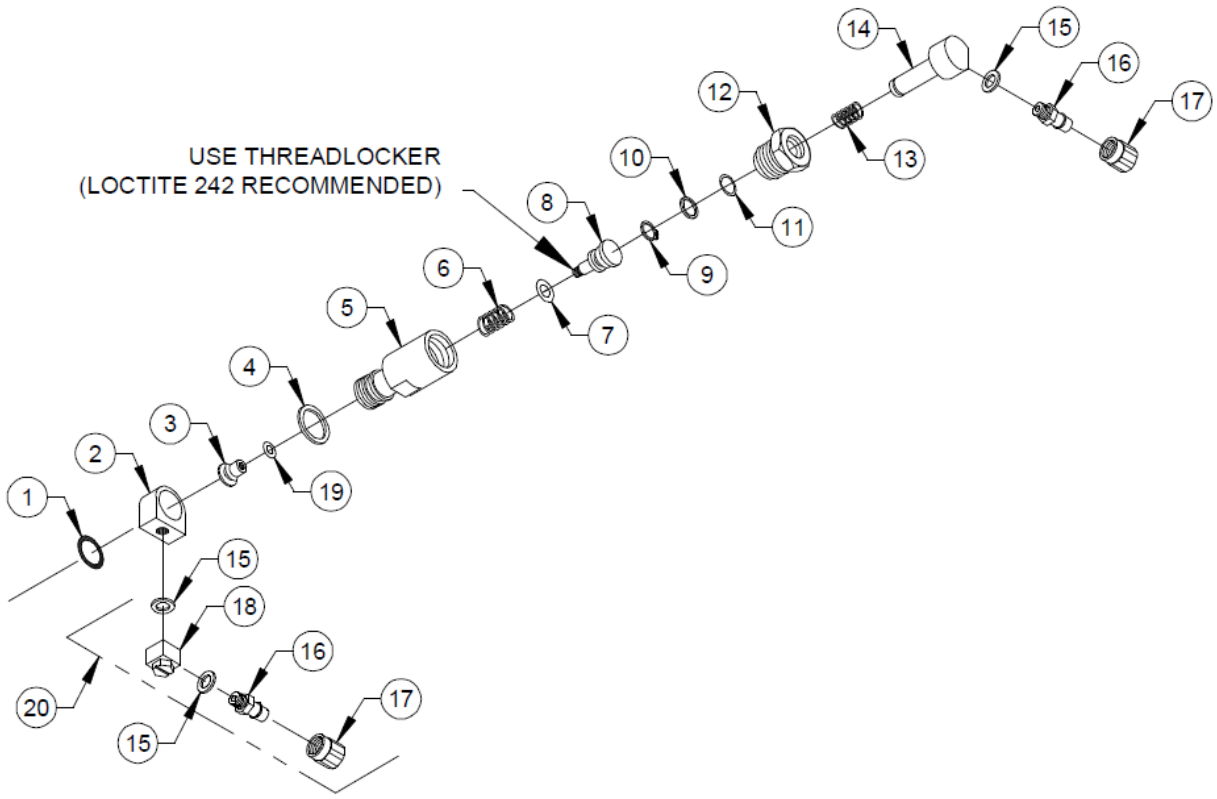


Automatic FIT Gun Head VFTC-4100-A-INT

ITEM	PART NO.	QTY	DESCRIPTION
3	5104-17-1	1	DISTRIBUTION RING

Automatic FIT Filled Gun Head VFTC-4100-F-A-INT

ITEM	PART NO.	QTY	DESCRIPTION
46	5104-18-1	1	FILLED RESIN DIST RING



MAGNUM VENUS PLASTECH

Automatic Flush Valve Assembly	58742-1

REV - 09-11-07 BT2
REV A - ADDED THREADLOCKER NOTE 10-12-08 BT2

Automatic Flush Valve Assembly 58742-1

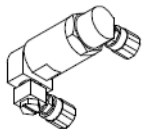
PARTS LIST

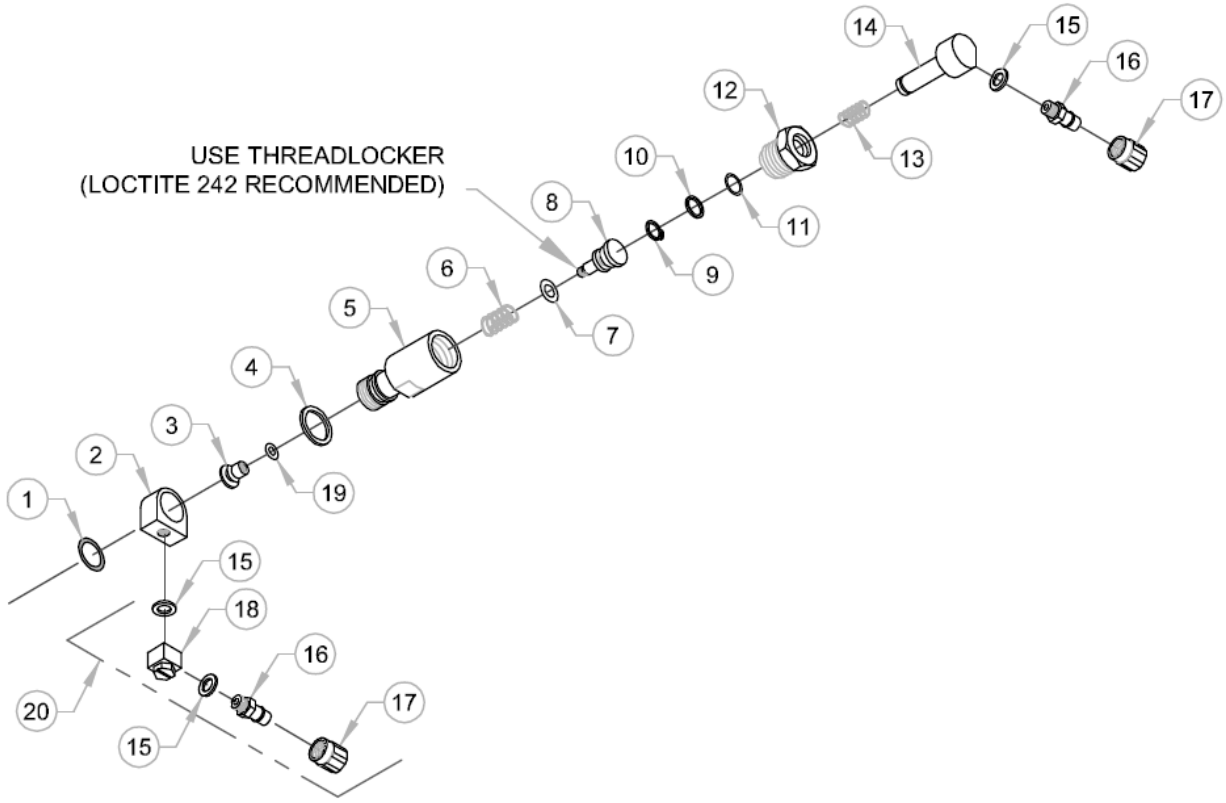
ITEM	PART NO.	QTY	DESCRIPTION
1	5104-21-1	1	FLUSH VALVE SPLIT SEAL
2	5104-22-1	1	FLUSH VALVE NECK
3	5104-23-1	1	FLUSH SEAL BODY
4	5104-26-1	1	FLUSH VALVE SEAL
5	58681-1	1	FLUSH VALVE BODY
6	9203-2-3	1	COMPRESSION SPRING
7	O-E-008	1	O-RING
8	5104-25-1	1	FLUSH VALVE BUTTON
9	00973	1	GRIP RING
10	58718-1	1	BACK UP RING
11	O-B-010	1	O-RING
12	58717-1	1	MANUAL / AUTO FLUSH BODY
13	04356	1	SPRING
14	58716-1	1	PUSH STEM
15	7304-3-1	3	NYLON SEAL
16	7701-6-3	2	BARB FITTING
17	7701-2-1	2	HOSE CLAMP
18	TRU-1021	1	ELBOW FITTING
19	O-E-007	1	O-RING

OPTIONAL PARTS AND ASSEMBLIES

ITEM	PART NO.	QTY	DESCRIPTION
20	5104-02-01	1	FLUSH ELBOW ASSEMBLY

FIGURE 1-1





MAGNUM VENUS PLASTECH

Automatic Flush Valve Assembly	58742-1-INT

REV - 07-19-10 BT2

Automatic Flush Valve Assembly 58742-1-INT

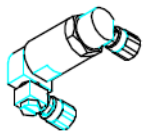
PARTS LIST

ITEM	PART NO.	QTY	DESCRIPTION
1	5104-21-1	1	FLUSH VALVE SPLIT SEAL
2	5104-22-1	1	FLUSH VALVE NECK
3	5104-23-1	1	FLUSH SEAL BODY
4	5104-26-1	1	FLUSH VALVE SEAL
5	58681-1	1	FLUSH VALVE BODY
6	9203-2-3	1	COMPRESSION SPRING
7	O-E-008	1	O-RING
8	5104-25-1	1	FLUSH VALVE BUTTON
9	00973	1	GRIP RING
10	58718-1	1	BACK UP RING
11	O-B-010	1	O-RING
12	58717-1	1	MANUAL / AUTO FLUSH BODY
13	04356	1	SPRING
14	58716-1	1	PUSH STEM
15	7304-3-1	3	NYLON SEAL
16	7701-6-3	2	BARB FITTING
17	7701-2-1	2	HOSE CLAMP
18	TRU-1021	1	ELBOW FITTING
19	O-A-007	1	O-RING

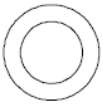
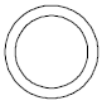
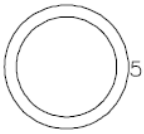
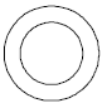
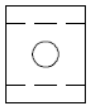
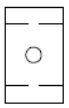
OPTIONAL PARTS AND ASSEMBLIES

ITEM	PART NO.	QTY	DESCRIPTION
20	5104-02-01	1	FLUSH ELBOW ASSEMBLY

FIGURE 1-1



6702–016–01–A
REPAIR KIT– PRO AUTOMATIC KIT

1 PC		O–B–010 O–RING
1 PC		O–E–007 O–RING
1 PC		O–E–008 O–RING * DO NOT GREASE THIS O–RING
1 PC		O–E–3–904 O–RING
1 PC		O–S–5–125 O–RING
1 PC		O–S–3–903 O–RING
1 PC		5104–13–1 INJECTOR SEAL
3 PCS		7304–3–1 NYLON SEAL
1 PCS		58718–1 BACK UP RING
1 PC		5104–21–1 SPLIT SEAL
2 PCS		5104–3–1 SECONDARY SEAL
1 PC		5104–26–1 FLUSH VALVE SEAL
1 PC		5104–12–1 MIX HOUSING SEAL
2 PCS		5104–7–1 PACKING RING
1 PC		5104–5–1 TEFLON RESIN SEAL
1 PC		5104–6–1 TEFLON CATALYST SEAL

CPT–2000–A–RK
MAJOR REPAIR KIT – PRO FIT GUN

1 PC O–E–007 O–RING

1 PC O–E–008 O–RING
DO NOT GREASE THIS O–RING

1 PC O–E–3–904 O–RING

1 PC O–S–5–125

1 PC O–S–3–903 O–RING

2 PCS O–V–013 O–RING

3 PCS O–V–020 O–RING

1 PC 5104–13–1 INJECTOR SEAL

2 PCS 7304–3–1 NYLON SEAL

4 PCS 5106–3–1 GUN BLOCK SEAL

2 PCS 5104–3–1 SECONDARY SEAL

1 PC 5104–26–1 FLUSH VALVE SEAL

1 PC 5104–12–1 MIX HOUSING SEAL

1 PC 5104–21–1 SPLIT SEAL

2 PCS 5104–7–1 PACKING RING

1 PC 02030–1 SEAL

1 PC 5104–5–1 TEFLON RESIN SEAL

1 PC 5104–6–1 TEFLON CATALYST SEAL

1 PC VPG–1003
MIXER ELEMENT

1 PC 6705–1–1 PACKING BIT

PRTM–DG–3000–A–RK
REPAIR KIT

1 PC O–A–007 O–RING

2 PC O–B–010 O–RING

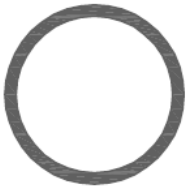
1 PC O–E–008 O–RING
DO NOT GREASE THIS O–RING

1 PC O–E–3–904 O–RING

1 PC O–S–5–125

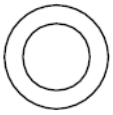
1 PC O–S–3–903 O–RING

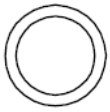
2 PCS O–V–013 O–RING

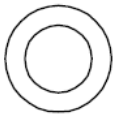
3 PCS  O–V–020 O–RING

1 PC 5104–13–1 INJECTOR SEAL

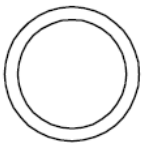
4 PCS 5106–3–1 GUN BLOCK SEAL

2 PCS  5104–3–1 SECONDARY SEAL

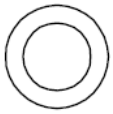
1 PC  5104–26–1 FLUSH VALVE SEAL

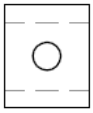
1 PC  02149–1 NOZZLE SEAL

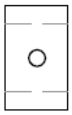
3 PCS 7304–3–1 NYLON SEAL

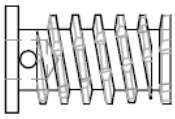
1 PC  5104–12–1 MIX HOUSING SEAL

1 PC 5104–21–1 SPLIT SEAL

2 PCS  5104–7–1 PACKING RING

1 PC  5104–5–1 TEFLON RESIN SEAL

1 PC  5104–6–1 TEFLON CATALYST SEAL

1 PC  5107–27–3 TURBULENT MIXER

1 PC 6705–1–1 PACKING BIT

1 PC MIX–1080
MIXER ELEMENT

Revision Information:

Rev. 12/2010	Add this revision information chapter. We updated the parts drawings in the manual and the manual format. Updated the flush valve information and the options.
Rev: 06/2012	Updated the manual format and Address. Added the Terms & Conditions of Sale section to the manual.
Rev. 11/2012	Updated the drawing PRTM-DG-3000-A Innovator Dispense Gun.

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Assemblies Covered in this Manual:

58685-1	AUTO PRO GUN ASSEMBLY
CPG-1000-A	AUTO PRO GUN ASSEMBLY
CPG-1000-A-INT	AUTO PRO GEL COAT GUN – INTERNATIONAL
CPG-2000-A	AUTO PRO GEL COAT GUN – FIT
CPG-2000-A-INT	AUTO PRO GEL COAT GUN – INTERNATIONAL FIT
CPC-1000-A	AUTO PRO CHOPPER GUN
CPC-1000-A-INT	AUTO PRO CHOPPER GUN – INTERNATIONAL
CPC-1000-A-INV	AUTO PRO GUN ASSEMBLY – INNOVATOR
CPC-2000-A	AUTO PRO CHOPPER GUN – FIT
CPC-2000-A-INT	AUTO PRO CHOPPER GUN – INTERNATIONAL FIT
CPT-2000-A	AUTO PRO GUN ASSEMBLY – TAPE MACHINE
PRTM-DG-3000-A	AUTO PRO GUN ASSEMBLY – INNOVATOR DISPENSE GUN